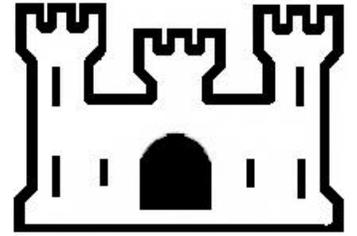


**US Army Corps  
Of Engineers  
Southwestern Division  
Reservoir Control Center**



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# **FY 2003 Annual Water Control Report**



**August 2004**  
**FOR OFFICIAL USE ONLY**



**FY 2003**

**ANNUAL WATER CONTROL REPORT**

**RESERVOIR CONTROL CENTER**

**SOUTHWESTERN DIVISION**

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**SECTION I**  
**INTRODUCTION**

## SECTION I – INTRODUCTION

1. **PURPOSE OF REPORT.** This report presents activities and accomplishments of the Southwestern Division (SWD) as related to reservoir regulation and water management activities throughout FY03. Detailed summaries of reservoir conditions are also included.

This report is prepared in conformance with ER 1110-2-1400, 30 September 1993, Reservoir Control Centers.

2. **REFERENCE.** Reservoir Control Center (RCC) - SWD Guidance Memorandum, dated June 1971, approved by the Chief of Engineers as a general basis for the RCC's activities.
3. **OBJECTIVES OF THE RESERVOIR CONTROL CENTER.** The SWD RCC was established in 1967 by the Chief of Engineers to improve capabilities of the Corps of Engineers to perform its civil works mission as related to operation of reservoirs. The SWD RCC carries out its responsibilities by:
  - a. Organizing coordinating committees and/or participating in committees to accomplish mutual understanding among water interests regarding use and regulation of water resources.
  - b. Providing interbasin coordination of day-to-day regulation needs for river systems for all purposes.
  - c. Surveillance of daily operations and continuous analysis of project needs.
  - d. Furnishing technical assistance to personnel of District offices in related efforts to improve the reliability of regulations and hydrologic determinations.
  - e. Provide management and technical guidance for the development and operation of the Division-wide dedicated water control data system. This system includes the equipment and software used for the acquisition, transmission and processing of real-time hydrologic and meteorological data for the purpose of regulating projects for which the Corps of Engineers has responsibility.

## **SECTION II**

# **WATER CONTROL ACTIVITIES IN SWD**

## SECTION II - WATER CONTROL ACTIVITIES IN SWD

### 1. RESERVOIR REGULATION.

- a. **Lake Regulation During FY 03.** Lake regulation activities for Division lakes and Section 7 lakes during FY 03 are summarized in Section VI through IX of this report. Operational data summaries for all of the SWD projects, including Section 7, are shown in tabular form, Section X. An index, by basin, to these tables is included which also lists pertinent data for each project. Also included is a listing in alphabetical order giving names of both the lake and dam where different.
- b. **System Regulation Studies.** None done in 2003.
- c. **Water Control Manuals.** A summary entitled "Status of Water Control Manuals in SWD" is included in Section IV of this report. The summary gives the status and completion schedule through FY 04 for manuals and plans for 105 lakes and 14 river systems and subsystems. Also shown in Section IV is a schedule for completion of high priority Water Control Plans for FY 04 through FY 09. At the end of FY 03, there were 91 Corps of Engineers projects (73 lakes and 18 locks and dams) and 14 Section 7 lakes in operation in SWD. The schedule for FY 04 includes the submission of four complete water control manuals, seven flood control plans (Chap.7 of the water control manuals) and two drought contingency plan for review.
- d. **Drought Contingency Plans.** A letter dated 8 June 1988 Subject; "Drought Contingency Plans (DCP)" renewed efforts within the Southwestern Division for the development of DCP's and provided additional guidance to supplement that contained in ER-1110-2-1941. This letter requested that DCP's be developed for all Corps projects with controlled reservoir storage and that the plans should only address temporary project modifications to satisfy short-term needs that can be implemented within existing authorities. During FY 88 several meetings were held in the SWD office with District personnel to develop a framework for DCP's, submittal schedules, review procedures, funding, etc. The DCP's address individual projects, however, they were developed on a river basin or sub-basin concept to include like projects. Each of the documented DCP's is an appendix to the respective river basin Master Water Control Manual. A total of 18 DCP's were required for the river basins within the SWD. A table showing the river basin and projects within each basin is included in Section IV of this report. At the end of FY 92, all 18 plans had been completed and approved. Two drought contingency plan is scheduled to be updated this FY.
- e. **Section 7 Project Regulation.** Within SWD there are 14 existing Section 7 reservoirs owned and operated by other agencies. The flood control storage contained in these projects is regulated by the Corps in accordance with Section 7 of the Flood Control Act of 1944. The

Districts are continuing their efforts to bring the manuals and regulation plans into compliance with requirements contained in paragraph 208.11, Part 208 Flood Control Regulations, Chapter 11, Title 33 of the Code of Federal Regulations (41 FR 20401, May 18, 1976). Due to the varied approaches between the Districts on real time regulation for Section 7 projects, SWDO issued a policy letter on 21 March 1983. The purpose of the letter was to supersede previous SWDO guidance and to provide current policies on Section 7 projects. This letter and subsequent letters have been issued to the Districts requiring that policy on Section 7 projects are coordinated with project owners and that finalizing of water control manuals for existing projects should be expedited.

## 2. **DATA COLLECTION AND MANAGEMENT.**

- a. **Stream Gaging Program.** The reporting and measurement of flow, water quality and sediment data are required for regulation, investigation and design of water resources projects. Data is obtained through a Cooperative Stream Gaging program between the Corps and the U.S. Geological Survey (USGS). During FY 03 the SWD-USGS cooperative program contained 290 surface water stations, 40 water quality stations, and 20 precipitation stations. The total cost of the SWD-USGS program was \$2.2 million. An additional 160 stations are operated by District personnel.
  
- b. **Cooperative Reporting Networks.** The National Weather Service (NWS) and the Corps of Engineers began their 64th year of cooperation in establishing and operating networks of river and/or rainfall reporting stations. Reports from these networks supplement those stations maintained by the NWS and are utilized by the Corps of Engineers for flood control operations and flood forecasting. Hydrologic data, and other data necessary to the Corps Water Management functions, are transmitted via satellite and communications networks from the NWS's River Forecast Centers in Tulsa and Fort Worth to the Division and District offices. The data includes information on rainfall, river stages, floods, severe storms, and river forecasts, all developed by the NWS.

The estimated cost to SWD for responsibilities supporting 450 rainfall stations in the NWS Cooperative Reporting Network, was \$279,399.

- c. **Water Control Data System.** The "Water Control Data System Master Plan" for the Southwestern Division was approved by the Office, Chief of Engineers in April 1994, printed and distributed to the Districts in May 1994. The Master Plan is reviewed and revised periodically.

### (1) **Communications.**

- (a) Data Collection Platforms (DCP's) transmit remote gaging station data over the Geostationary Orbiting Environment Satellite (GOES) system, which in turn, downloads that data to Wallops Island. Wallops uploads to DOMSATs (Domestic Satellites) and the data for each particular district is picked up by the district's DROT (Data Receive Only Terminal) and then downloaded to the local Unix systems. The Fort Worth DROT broadcasts data to a designated socket connection to the Division WCDS computer, the Tulsa DROT provides backup for Division. Little Rock District's DROT is also fully functional. Galveston District's new DROT is operational.
  - (b) National Weather Service (NWS) Automated Field Office Service (AFOS) data is provided by the Fort Worth and Tulsa National Weather Service River Forecast Center computers to the Fort Worth and Tulsa district WCDS. The Division receives the AFOS information via CEAP network socket connection from the Fort Worth and Tulsa districts' WCDS.
  - (c) Communication between the District and Division WCDS is via the CEEIS network using TELNET and FTP. Internal communication utilizes Exceed between the Sun Ultra and PC's.
- (2) **Data Acquisition and Analysis.** In September 1993, the SWD RCC began using the WCDS Unix-based computer system for applications that are necessary in the RCC's daily water control activities. The present SWD hardware includes a Sun Sparc Ultra, and a WCDS local area network. The Sun Sparc was installed in FY97; the most recent update to hardware and software in FY01.

Plans are to utilize Oracle IAW the CWMS Modernization Program and training of RCC personnel in Oracle will begin. SWD also maintains a time-series data storage system (HEC-DSS) collecting Division-wide data. The HEC-DSS at Fort Worth, Galveston, Tulsa, and Little Rock District offices are also available to the Division office.

Data is displayed on PC's, color plotters, and Laserjet printers. Graphic application programs utilize TEMPLATE software embedded in Fortran programs on the Unix systems, and Microsoft PowerPoint for Windows on PC's. Provisions are made to exchange data with other water management cooperators, i.e. the Office of the Chief of Engineers, Mississippi Valley Division (MVD), National Weather Service in Tulsa and Topeka, Southwestern Power Administration (SWPA), the Bureau of Reclamation, and a variety of state/local river authorities and agencies. Currently, SWD maintains daily Division Hydropower Generation reports and daily Division Lake Reports. This data, with several District auxiliary programs and data, is available to other users who have a need to be aware of the water control activities.

Tulsa and Fort Worth collect Stage 3 data from the National Weather Service River Forecast Centers and have developed software programs to utilize this information.

### **3. COORDINATION WITH WATER MANAGEMENT INTERESTS.**

a. **General.** The benefits derived from coordination with other personnel associated with water management activities are well recognized. For this reason, special emphasis has been placed maintaining this type of interface through teleconferences, meetings and specialty workshops. These occasions are sponsored by the district, division, HQUSACE and other Corps water management related offices.

- (1) An annual meeting of the Reservoir Control personnel within SWD is convened by the SWD RCC for the purpose of discussing timely topics and exchanging information. Personnel from Mississippi River Division District also were in attendance. This year the annual meeting was hosted by Fort Worth District at New Braunfels, Texas with a site visit to Canyon Lake. The meeting was convened 12-13 November 2003.
- (2) All four districts were visited at least once by selected staff of the SWD RCC (See para. 5.b.(5) of this section). These inspection visits were orchestrated to assess, observe and offer guidance or assistance to insure each district's RCC mission directives were in place and operating at full efficiency. Each visit concluded with an exit briefing given to the Chief of the section and other invited senior district personnel. Each inspection was followed-up by a set of written minutes and recommendations.

#### **b. Agency coordination.**

##### **(1) Arkansas River Basin Coordinating Committee.**

- (a) The Arkansas River Basin Coordinating Committee (ARBCC) was established as an advisory committee during development and adoption of a formal plan of regulation for the Arkansas River Basin system of flood control reservoirs. The committee met annually from 1970 through 1982. The product of these efforts was a series of annual refinements to the operating plan culminating with the 1979 plan, which was adopted. The committee was reestablished in 1986 in response to basin water user's concern over the Corps adoption of the "1986 Arkansas River Basin Operational Plan" (commonly referred to as the "fine tuning plan"). Notification of this plan, which is still current, was issued on 17 June 1986. At that time, the water users suggested that the Division Commander develop a formal operating charter for the committee. During development and coordination associated with development of the draft charter, SWD staff (Engineering Division, Resource Management and Office of Counsel) advised the Division Commander that the ARBCC, although an operating body since 1970, was not

in complete conformance with the Federal Advisory Committee Act (FACA) enacted in 1972. The FACA severely limits a Federal agency's authorities as they apply to a group such as the ARBCC. Furthermore, the only way to sanction continued Corps involvement (other than as a technical advisor) would be to seek authorization through legislation or approval by the Department of the Army in accordance with AR 15-1 procedures. However, the FACA does not apply to meetings if they are open to the public and are conducted in an informal environment for the purpose of obtaining the advice of individual attendees and not for the purpose of utilizing the group to obtain consensus advice or recommendations. In view of the above, the non-Corps leadership of the ARBCC was informally notified of these constraints and that the only role that the Corps could legally participate in was that of a technical advisor. ARBCC did convene a meeting in May 1997, however, the Corps' participation (Tulsa District) was limited to attending and acting only as a designated technical advisor.

- (2) **Cooperation with Mississippi Valley Division.** The SWD RCC continues its cooperation with MVD and provides observed, as well as forecasted data, significant to the water management activities in MVD.
- (3) **Cooperation with Southwestern Power Administration.** The SWPA is an agency of the United States, established in the Department of Energy, to execute the purposes of the Flood Control Act of 1944 with respect to the disposition of the electric power and energy made available from the reservoir projects under control of the Department of the Army in the area comprising all of Arkansas and Louisiana and portions of Missouri, Kansas, Texas, and Oklahoma. The scheduling of releases for hydropower production from the 18 Corps of Engineers projects within SWD has a significant effect on the overall water management activities in the Division. Therefore, close cooperation and continuous communication between the Corps and SWPA are mandatory. A Memorandum of Understanding was signed by the SWPA and the Corps of Engineers in 1980. SWPA and SWD have proceeded to develop a draft detail Operating Arrangement to assist in the operations of hydropower projects within SWD. SWD has formally informed the SWPA that the draft document would be its policy for coordinating operations with them until such time that both agencies have signed the arrangement. Specific activities included in the Operating Arrangement for cooperation between SWPA and RCC are monthly scheduling of power production, preparation of data for reports to the Federal Energy Regulatory Commission (FERC), and daily coordination of routine data on current conditions, inflow forecasts, and release schedules. The RCC has taken every opportunity to improve and strengthen relations with SWPA through correspondence, regularly scheduled and special meetings, providing access to our computer systems, and by special studies aimed at improving energy production and scheduling at SWD power projects.
- (4) **Cooperation with the National Weather Service.** Little Rock District is coordinating all efforts with respect to obtaining Next Generation Radar data (NEXRAD)

within SWD. LRD is receiving data from several sites.

**SECTION III**  
**FACILITIES AND PERSONNEL**

## SECTION III - FACILITIES AND PERSONNEL

### 1. Facilities.

- a. **Office Space.** Water Management personnel are located on the eighth floor of the Earl Cabell Federal Building, 1100 Commerce Street, Dallas, Texas.
- b. **Display Facilities.** The display equipment located in the Engineering Division Conference Room consists of a 486 Intel-based PC operating a 37" NEC Monitor; an overhead projector; video cassette recorder; portable projection equipment; a projection screen; and multiple chalkboards. This equipment supports conferences, briefings and flood emergency/weather briefings.
- c. **Communications Equipment.** The WCDS computer system is a TCP/IP based network of an Ultra Sun Sparc workstation, , WINDOWS/NT 486 Intel-based personal computers, a WCDS local area network, a brouter, a device interface (DI), printers and various support equipment.
  - (1) **WCDS Computers.** A new Ultra Sun Sparc 60 workstation was installed and is running HEC applications. The operating system was upgraded to Solaris 8. These updates/upgrades were made to comply with hardware/software requirements for deployment of CWMS.
  - (2) **Local PC's.** Intel-based 486 computers are used to communicate not only with the local Unix systems, but also other Corps of Engineers computer systems via the CEAP wide area net, the WCDS local area network and the Information Management local area network. The PC's utilize XCEED for Windows/NT (with Microsoft Network Software) as a communication's package, acting as a 4107 interface to the graphics on the Unix systems. Local PC programs, i.e., Microsoft Windows 2000, Office 2000, Arc View, etc, are utilized on each system as well as the programs necessary to interact with IM's Microsoft Outlook Mail System.
  - (3) **Support Hardware.** A variety of printers, plotters, and general communications equipment (a brouter, a DI, and some modems) are located in the computer room. Emergency Operations provides the satellite-feed equipment for a 25" color television and VCR, used to monitor and record weather and news events on Cable News Network (CNN), The Weather Channel, C-SPAN, and local TV stations. All this equipment is additional support for the WCDS community in the Southwestern Division.

**2. Personnel.**

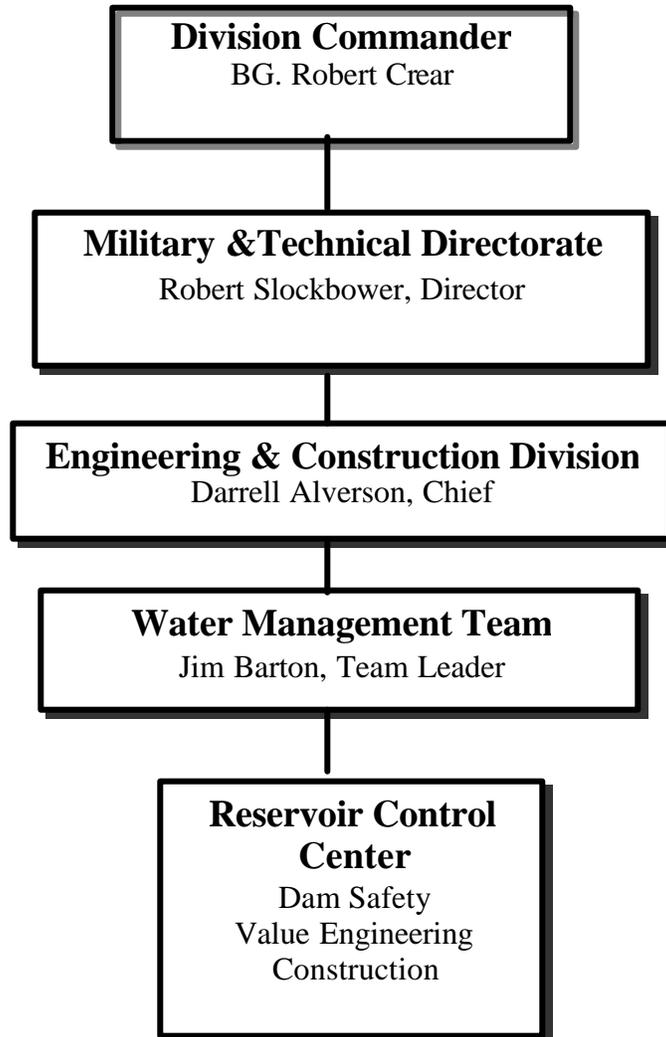
- a. **Staff.** The Reservoir Control Center is part of the Water Management Team, within the Engineering & Construction Division. The RCC has been assigned a staffing level of 3 positions. The positions consist of two GS-13 Hydraulic Engineers and one GS-12 Computer Specialist. The staffing level for RCC is described in Table 1. The Command Structure diagram shown at the end of this section describes the Chain of Command structure.

**Table 1  
Southwestern Division  
Reservoir Control Center Organization and Staff**

<b>Name</b>	<b>Position</b>
Darrell Alverson	Chief, Engineering & Construction Division
Jim Barton	Team Leader, Water Management Team
Gary Goodwin	Hydraulic Engineer
Vacant	Hydraulic Engineer
Annabeth Lee	Computer Specialist

- b. **Training.** The RCC periodically assesses the developmental needs of its personnel and schedules required training. During FY 03, RCC computer specialist attended local classes in computer training and graduate courses in GIS.

# Southwestern Division Reservoir Control Center Command Structure



**SECTION IV**

**STATUS OF WATER CONTROL MANUALS**

**AND**

**DROUGHT CONTINGENCY PLANS**

## SECTION IV - STATUS OF WATER CONTROL MANUALS AND DROUGHT CONTINGENCY PLANS

1. **Status Of Water Control Manuals.** Table 2 show the current status of the Southwestern Division Water Control Manuals.

**Table 2  
Status of Water Control Manuals in SWD  
(Report Control Symbol DAEN-CWE-16)**

Reservoir	Stream	Owner	Dist.	Approved		Sta. <sup>1</sup>	Scheduled Thru FY 04	
<b>White River Master</b>		CE	SWL	SEP 93	SWD	F		
Beaver	White River Basin	CE	SWL	OCT 98	SWD	F		
Table Rock	White River Basin	CE	SWL	JAN 67	OCE	F		[
Bull Shoals	White River Basin	CE	SWL	JAN 67	OCE	F		[
Norfork	White River Basin	CE	SWL	JAN 67	OCE	F		[
Clearwater	Black River	CE	SWL	JUL 95	SWD	F		
Greers Ferry	Little Red River	CE	SWL	JUN 66	OCE	F		[
[ - Due to WRDA '99 requirements and HQUSACE DYMS guidance, these manual updates are being suspended until outcome of studies and investigations are finalized and a clear direction has been established.								
<b>Arkansas Master</b>		CE	SWT	OCT 80	SWD	F		
Cheney (1)	N.F. Ninnescah	BR	SWT	MAR 97	SWD	F		
El Dorado	Walnut River	CE	SWT	JUN 01	SWD	F		
Kaw	Arkansas River	CE	SWT	FEB 95	SWD	F		
Great Salt Plains	Salt Fork Ark	CE	SWT	OCT 99	SWD	F		
Keystone	Arkansas River	CE	SWT	JAN 90	SWD	F		
Heyburn	Polecat Creek	CE	SWT	DEC 84	SWD	F	MAY 04	P
Webbers Falls , L&D 16	Arkansas River	CE	SWT	DEC 97	SWD	F		
Tenkiller Ferry	Illinois River	CE	SWT	MAR 77	SWD	F		
R.S. Kerr , L&D 15	Arkansas River	CE	SWT	DEC 98	SWD	F		
W.D. Mayo , L&D 14	Arkansas River	CE	SWT	MAY 99	SWD	F		
Wister	Poteau River	CE	SWT	JUN 74	SWD	F	FEB 04	P

NOTES: (1) = Section 7 Project, flood control regulation by CE.

AR = Approved, comments to be answered.

F = Complete, comments answered and approved.

FR = Published in Federal Register.

P = Plan.

R = Revision or answer to comments.

R\* = Returned without approval.

U = Update of existing approved manual.

GRDA = Grand River Dam Authority.

WCID = Wichita County Water Improvement District.

LCRA = Lower Colorado River Authority.

BR = Bureau of Reclamation

**Table 2**  
**Status of Water Control Manuals in SWD**  
**(Report Control Symbol DAEN-CWE-16)**

Reservoir	Stream	Owner	Dist.	Approved		Sta. <sup>1</sup>	Scheduled Thru FY 04	
<b>Verdigris System</b>								
Toronto	Verdigris River	CE	SWT	FEB 90	SWD	F		
Fall River	Fall River	CE	SWT	APR 93	SWD	F		
Elk City	Elk River	CE	SWT	SEP 95	SWD	F		
Pearson-Skubitz-Big Hill	Big Hill Creek	CE	SWT	APR 83	SWD	F		
Oologah	Verdigris River	CE	SWT	MAY 97	SWD	F		
Copan	Caney River	CE	SWT	MAR 83	SWD	F		
Hulah	Caney River	CE	SWT	MAR 99	SWD	F		
Birch	Bird Creek	CE	SWT	SEP 81	SWD	F	JUL 04	P
Skiatook	Hominy Creek	CE	SWT	APR 88	SWD	F		
Newt Graham , L&D 18	Verdigris River	CE	SWT	AUG 72 DEC 03	SWD SWD	F P		
Chouteau , L&D 17	Verdigris River	CE	SWT	AUG 72	SWD	F	MAY 04	
<b>Grand System</b>								
Council Grove	Neosho River	CE	SWT	MAR 95	SWD	F		
Marion	Cottonwood River	CE	SWT	APR 96	SWD	F		
John Redmond	Neosho River	CE	SWT	APR 96	SWD	F		
Pensacola (1)	Neosho River	GRDA	SWT	NOV 92	SWD	F		
Markham Ferry (1)	Neosho River	GRDA	SWT	NOV 92	SWD	F		
Fort Gibson	Neosho River	CE	SWT	NOV 92	SWD	F		
<b>Canadian System</b>								
Sanford (1)	Canadian River	BR	SWT	FEB 66	OCE	AR	SEP 03	P
Norman (1)	Little River	BR	SWT	OCT 93	SWD	F		
Optima	N. Canadian River	CE	SWT	JAN 72	SWD	F	AUG 04	P
Fort Supply	Wolf Creek	CE	SWT	JUL 03	SWD	F		
Canton	N. Canadian River	CE	SWT	DEC 93	SWD	F		
Arcadia	Deep Fork River	CE	SWT	JUN 86	SWD	F		
Eufaula	Canadian River	CE	SWT	JAN 94	SWD	F		

**Table 2**  
**Status of Water Control Manuals in SWD**  
**(Report Control Symbol DAEN-CWE-16)**

<b>Reservoir</b>	<b>Stream</b>	<b>Owner</b>	<b>Dist.</b>	<b>Approved</b>		<b>Sta.</b> <sup>1</sup>	<b>Scheduled Thru FY 04</b>	
<b>Arkansas Master</b>		CE	SWL	SEP 80	SWD	F		
Lock & Dam 13	Arkansas River	CE	SWL	SEP 91	SWD	F		
Ozark-Jetta Taylor	Arkansas River	CE	SWL	SEP 74	SWD	F		
Dardanelle	Arkansas River	CE	SWL	APR 76	SWD	F	SEP 04	U
Blue Mountain	Petit Jean	CE	SWL	OCT01	SWD	F		
Lock & Dam 9	Arkansas River	CE	SWL	SEP 98	SWD	F		
Lock & Dam 8 Toad Suck Ferry	Arkansas River	CE	SWL	AUG 74	SWD	F		
Nimrod	Fourche La Fave	CE	SWL	AUG 02	SWD	F		
Lock & Dam 7 Murray	Arkansas River	CE	SWL	MAY 97	SWD	F		
Lock & Dam 6 David D. Terry	Arkansas River	CE	SWL	SEP 74	SWD	F		
Lock & Dam 5	Arkansas River	CE	SWL	SEP 74	SWD	F		
Lock & Dam 4	Arkansas River	CE	SWL	SEP 74	SWD	F		
Lock & Dam 3	Arkansas River	CE	SWL	SEP 74	SWD	F		
Lock & Dam 2	Arkansas River	CE	SWL	DEC 98	SWD	F		
Lock & Dam 1 (Ark Post Canal)	Arkansas River	CE	SWL	SEP 74	SWD	F		
Montgomery Point L&D	White River	CE	SWL	N/A	N/A	N/A		
<b>Red River Master</b>		CE	SWT	FEB 63	OCE	AR		
Altus (1)	N. Fork River	BR	SWT	MAR 93	SWD	F		
Mountain Park (1)	Otter Creek	BR	SWT	OCT 93	SWD	F		
Truscott Brine Lake	Bluff Creek	CE	SWT	DEC 95	SWD	F		
Lake Kemp (1)	Wichita River	WCID	SWT	MAY 94	SWD	F		
Waurika	Beaver Creek	CE	SWT	APR 77	SWD	F	JAN 04	P
Foss (1)	Washita River	BR	SWT	SEP 93	SWD	F		
Fort Cobb (1)	Cobb Creek	BR	SWT	JUL 98	SWD	F		
Arbuckle (1)	Rock Creek	BR	SWT	AUG 03	SWD	F		
Texoma	Red River	CE	SWT	JUL 93	SWD	AR		
Pat Mayse	Sanders Creek	CE	SWT	OCT 67	OCE	F		
Sardis	Jackfork Creek	CE	SWT	AUG 84	SWD	F		
McGee Creek (1)	Muddy Boggy Creek	BR	SWT	OCT 89	SWD	F		
Hugo	Kiamichi River	CE	SWT	MAY 82	SWD	AR		

**Table 2**  
**Status of Water Control Manuals in SWD**  
**(Report Control Symbol DAEN-CWE-16)**

<b>Reservoir</b>	<b>Stream</b>	<b>Owner</b>	<b>Dist.</b>	<b>Approved</b>		<b>Sta. <sup>1</sup></b>	<b>Scheduled Thru FY 04</b>	
<b>Little River System</b>								
Pine Creek	Little River	CE	SWT	OCT 98	SWD	F		
Broken Bow	Mountain Fork	CE	SWT	NOV 74	SWD	F		
Dequeen	Rolling Fork	CE	SWL	JUN 76	SWD	R		
Gillham	Cossatot River	CE	SWL	JUL 86	SWD	F		
Dierks	Saline River	CE	SWL	APR 76	SWD	F		
Millwood	Little River	CE	SWL	NOV 73	SWD	F		
<b>Sulphur River Master</b>								
Cooper	Sulphur River	CE	SWF					
Wright Patman	Sulphur River	CE	SWF	SEP 74	LMVD	F		
Lake O' The Pines	Cypress Creek	CE	SWF	NOV 74	LMVD	F		
<b>Neches River Master</b>								
		CE	SWF	MAR 63	OCE	AR		
B. A. Steinhagen	Neches River	CE	SWF	FEB 63	OCE	AR		
Sam Rayburn	Angelina River	CE	SWF	FEB 73	SWD	AR		
<b>Trinity River Master</b>								
		CE	SWF					
Benbrook	Clear Fork	CE	SWF	SEP 01	SWD	F		
Joe Pool	Mountain Creek	CE	SWF	SEP 01	SWD	F		
Ray Roberts	Elm Fork	CE	SWF	DEC 97	SWD	F		
Lewisville	Elm Fork	CE	SWF	MAY 97	SWD	F		
Grapevine	Denton Creek	CE	SWF	AUG 96	SWD	F		
Lavon	East Fork	CE	SWF	APR 03	SWD	F		
Navarro Mills	Richland Creek	CE	SWF	JUL 64	OCE	AR		
Bardwell	Waxahacie Creek	CE	SWF	MAR 89	SWD	F		
Wallisville	Trinity River	CE	SWG					
<b>Buffalo Bayou Master</b>								
		CE	SWG					
Barker	Buffalo Bayou	CE	SWG	OCT 78	SWD	F		
Addicks	Buffalo Bayou	CE	SWG	OCT 78	SWD	F		

**Table 2**  
**Status of Water Control Manuals in SWD**  
**(Report Control Symbol DAEN-CWE-16)**

<b>Reservoir</b>	<b>Stream</b>	<b>Owner</b>	<b>Dist.</b>	<b>Approved</b>		<b>Sta.</b> <sup>1</sup>	<b>Scheduled Thru FY 04</b>	
<b>Brazos River Master</b>		CE	SWF	MAR 73	SWD	R*		
Whitney	Brazos River	CE	SWF	MAY 75	SWD	F		
Aquilla	Aquilla Creek	CE	SWF	JUL 88	SWD	F		
Waco	Bosque River	CE	SWF	JUN 75	SWD	F		
Proctor	Leon River	CE	SWF	APR 74	SWD	F		
Belton	Leon River	CE	SWF	MAY 76	SWD	F		
Stillhouse Hollow	Lampasas River	CE	SWF	FEB 79	SWD	F		
Georgetown	N.F. San Gabriel	CE	SWF	JUN 90	SWD	F		
Granger	San Gabriel	CE	SWF	MAR 91	SWD	F		
Somerville	Yegua Creek	CE	SWF	NOV 73	SWD	F		
<b>Colorado River Master</b>		CE	SWF					
Hords Creek	Hords Creek	CE	SWF	MAY 62	OCE	AR		
O.C. Fisher	N. Concho	CE	SWF	DEC 62	OCE	AR		
Twin Buttes (1)	S. Concho	BR	SWF	SEP 66	OCE	P/FR		
Marshall Ford (1)	Colorado River	BR	SWF	AUG 99	SWD	P/FR		
<b>Guadalupe River Master</b>		CE	SWF	JAN 66	OCE	AR		
Canyon	Guadalupe River	CE	SWF	OCT 78	SWD	F		

2. **Schedule of High Priority Water Control Plans.** Table 3 shows the schedule of the Southwestern Division High Priority Water Control Plans from FY04 through FY09.

**Table 3**  
**Southwestern Division**  
**Schedule of High Priority Water Control Plans**  
**FY 04 Thru FY 09**

<b>FY</b>	<b>Fort Worth</b>	<b>Galveston</b>	<b>Little Rock</b>	<b>Tulsa</b>
04	Cooper		Dardanelle	Sanford (Plan)
	Navarro Mills			Chouteau L&D
	Canyon (correction)			Waurika (Plan)
				Wister (Plan)
				U. Neo. R. (Drought Plan)
				Heyburn (Plan)
				Birch(Plan)
				Optima(Plan)
				U. Red R. (Drought Plan)
05	Sam Rayburn(Plan)		Montgomery Point L&D	Arcadia (Plan)
	Town Bluff(Plan)		D.D. Terry L&D 6	Big Hill (Plan)
				Copan (Plan)
				Hugo (Plan)
				Pat Mayse (Plan)
				Tenkiller (Plan)
				L. Ark. R. (Drought Plan)
				Mid-Ark. R. (Drought Plan)
06	Bardwell		L&D 5	Keystone (Plan)
			Emmett Sanders L&D 4	McGee Creek (Plan)
			Joe Hardin L&D 3	Canadian R.(Drought Plan)
				L. Red R. (Drought Plan)
				Skiatook (Plan)
				Altus (Plan)
				Hudson (Plan)
07	Sam Rayburn (manual)	Addicks	Ozark-Jetta Taylor L&D 12	Canton (Plan)
	Town Bluff (manual)	Barker	Toad Suck Ferry L&D 8	Fall River (Plan)
				Sardis (Plan)
				Pensacola (Plan)
				Toronto (Plan)
				Texoma (Plan)
				Norman (Plan)
				Upper Verd (Drought Plan)

**Table 3**  
**Southwestern Division**  
**Schedule of High Priority Water Control Plans**  
**FY 04 Thru FY 09**

<b>FY</b>	<b>Fort Worth</b>	<b>Galveston</b>	<b>Little Rock</b>	<b>Tulsa</b>
08	Canyon		Millwood	Council Grove (Plan)
			Dierks	Elk City (Plan)
			DeQueen	Eufaula (Plan)
				Foss (Plan)
				Fort Gibson (Plan)
				Kaw (Plan)
				Kemp (Plan)
				Mountain Park (Plan)
09	Wright Patman		Gillham	Cheney(Plan)
			Norrell L&D 1	John Redmond(Plan)
				Marion(Plan)
				Oologah(Plan)
				Webbers Falls(Plan)
				Arkansas R. Master(Plan)
				Red River Master(Plan)

3. **Drought Contingency Plans.** Table 4 shows the Southwestern Division drought contingency plans.

**Table 4**  
**Drought Contingency Plans In SWD**

<b>Basin/Project</b>	<b>Stream</b>	<b>Dist.</b>	<b>Completion</b>	<b>Status</b>
<b>White River Basin</b>		SWL	August 1990	Approved Plan/SEP 89
Beaver	White River	SWL		
Table Rock	White River	SWL		

**Table 4**

**Drought Contingency Plans In SWD**

<b>Basin/Project</b>	<b>Stream</b>	<b>Dist.</b>	<b>Completion</b>	<b>Status</b>
Bull Shoals	White River	SWL		
Norfolk	White River	SWL		
Clearwater	Black River	SWL		
Greer's Ferry	Little Red River	SWL		
<b>Mid-Arkansas River Basin</b>		SWT	December 1990	Approved Plan/JUN 91
El Dorado	Walnut River	SWT		
Kaw	Arkansas River	SWT		
Great Salt Plains	Salt Fork ARK	SWT		
Keystone	Arkansas River	SWT		
Heyburn	Polecat Creek	SWT		
<b>Upper Verdigris River Basin</b>		SWT	July 1990	Approved Plan/AUG 90
Toronto	Verdigris River	SWT		
Fall River	Fall River	SWT		
Elk City	Elk River	SWT		
Pearson-Skubitz-Big Hill	Big Hill Creek	SWT		
<b>Lower Verdigris River Basin</b>		SWT	March 1990	Approved Plan/AUG 90
Copan	Caney River	SWT		Revision Approved NOV 02
Hulah	Caney River	SWT		
Birch	Bird Creek	SWT		
Skiatook	Hominy Creek	SWT		
Oologah	Verdigris River	SWT		
<b>Upper Neosho River Basin</b>		SWT	August 1989	Approved Plan/OCT 90
Council Grove	Neosho River	SWT		Revision Submitted SEP 03
Marion	Cottonwood River	SWT		
John Redmond	Neosho River	SWT		
<b>Lower Ark River Basin, SWT</b>		SWT	August 1989	Approved Plan/AUG 90
Fort Gibson	Neosho River	SWT		
Tenkiller Ferry	Illinois River	SWT		
Wister	Poteau River	SWT		
<b>Canadian River Basin</b>		SWT	July 1990	Approved Plan/MAY 91
Optima	N. Canadian River	SWT		
Fort Supply	Wolf Creek	SWT		

**Table 4**

**Drought Contingency Plans In SWD**

<b>Basin/Project</b>	<b>Stream</b>	<b>Dist.</b>	<b>Completion</b>	<b>Status</b>
Canton	N. Canadian River	SWT		
Arcadia	Deep Fork River	SWT		
Eufaula	Canadian River	SWT		
<b>Navigation Projects, SWT</b>		SWT	December 1990	Approved Plan/SEP 92
Newt Graham, L&D 18	Arkansas River	SWT		
Chouteau, L&D 17	Arkansas River	SWT		
Webbers Falls, L&D 16	Arkansas River	SWT		
R.S. Kerr, L&D 15	Arkansas River	SWT		
W.D. Mayo, L&D 14	Arkansas River	SWT		
<b>Lower Arkansas R. Basin, SWL</b>		SWL	MARCH 1990	Approved Plan/SEP 92
Blue Mountain	Petit Jean	SWL		
Nimrod	Foruche La Fave	SWL		
Ozark-Jetta Taylor	Arkansas River	SWL		
Dardanelle	Arkansas River	SWL		
Navigation L&D'S(10)	Arkansas River	SWL		
<b>Upper Red River Basin</b>		SWT	March 1990	Approved Plan/AUG 89
Texoma	Red River	SWT		Revision Scheduled SEP 04
Waurika	Beaver Creek	SWT		
<b>Lower Red River Basin,SWT</b>		SWT	July 1990	Approved Plan/JAN 90
Pat Mayse	Sanders Creek	SWT		
Sardis	Jackfork Creek	SWT		
Hugo	Kiamichi River	SWT		
Pine Creek	Little River	SWT		
Broken Bow	Mountain Fork	SWT		
<b>Little River Basin</b>		SWL	November 1990	Approved Plan/OCT 91
DeQueen	Rolling Fork	SWL		
Gillham	Cossatot River	SWL		
Dierks	Saline River	SWL		
Millwood	Little River	SWL		
<b>Lower Red River Basin, SWF</b>		SWF	August 1990	Approved Plan/OCT 91
Cooper	Sulphur River	SWF		

**Table 4**

**Drought Contingency Plans In SWD**

<b>Basin/Project</b>	<b>Stream</b>	<b>Dist.</b>	<b>Completion</b>	<b>Status</b>
Wright Patman	Sulphur River	SWF		
Lake O' The Pines	Cypress Creek	SWF		
<b>Neches River Basin</b>		SWF	February 1991	Approved Plan/AUG 91
B. A. Steinhagen	Neches River	SWF		
Sam Rayburn	Angelina River	SWF		
<b>Trinity River Basin</b>		SWF	August 1989	Approved Plan/AUG 91
Benbrook	Clear Fork	SWF		
Joe Pool	Mountain Creek	SWF		
Ray Roberts	Elm Fork	SWF		
Lewisville	Elm Fork	SWF		
Grapevine	Denton Creek	SWF		
Lavon	East Fork	SWF		
Navarro Mills	Richland Creek	SWF		
Bardwell	Waxahacie Creek	SWF		
<b>Brazos River Basin</b>		SWF	May 1990	Approved Plan/AUG 91
Whitney	Brazos River	SWF		
Aquilla	Aquilla River	SWF		
Proctor	Leon River	SWF		
Belton	Leon River	SWF		
Stillhouse Hollow	Lampasas River	SWF		
Georgetown	N.F. San Gabriel	SWF		
Granger	San Gabriel	SWF		
Waco	Bosque River	SWF		
Somerville	Yequa Creek	SWF		
<b>Colorado River Basin</b>		SWF	November 1990	Approved Plan/AUG 91
Hords Creek	Hords Creek	SWF		
O.C. Fisher	North Concho	SWF		
<b>Guadalupe River Basin</b>		SWF	May 1991	Approved Plan/AUG 91
Canyon	Guadalupe River	SWF		

**SECTION V**

**REGULATION OF MULTI-PURPOSE PROJECTS**

**WITH HYDROPOWER**

## SECTION V - HYDROPOWER GENERATION- SOUTHWESTERN DIVISION PROJECTS

1. **Federal Hydropower at SWD Projects.** The 18 Federal Hydropower Projects are listed in Table 5.

**TABLE 5**

### Southwestern Division Federal Hydropower Projects

Projects	Basin	Stream	No. Units	Total Capacity MW	Page No.
Beaver Lake	White	White	2	112	V- 3
Table Rock Lake	White	White	4	200	V- 3
Bull Shoals Lake	White	White	8	340	V- 4
Norfork Lake	White	North Fork	2	70	V- 4
Greers Ferry	White	Little Red	2	96	V- 5
Keystone Lake	Arkansas	Arkansas	2	70	V- 5
Ft. Gibson Lake	Arkansas	Grand	4	45	V- 6
Webbers Falls	Arkansas	Arkansas	3	60	V-6
Tenkiller Ferry Lake	Arkansas	Illinois	2	34	V- 7
Eufaula Lake	Arkansas	S. Canadian	3	90	V- 7
Robert S. Kerr	Arkansas	Arkansas	4	110	V- 8
Ozark-Jetta Taylor	Arkansas	Arkansas	5	100	V- 8
Dardanelle	Arkansas	Arkansas	4	124	V- 9
Denison Dam	Red	Red	2	70	V- 9
Broken Bow Lake	Red	Mountain Fork	2	100	V- 10
Lake Sam Rayburn	Neches	Angelina	2	52	V- 10
Town Bluff	Neches	Neches	2	7	V- 11
Whitney Lake	Brazos	Brazos	2	30	V- 11

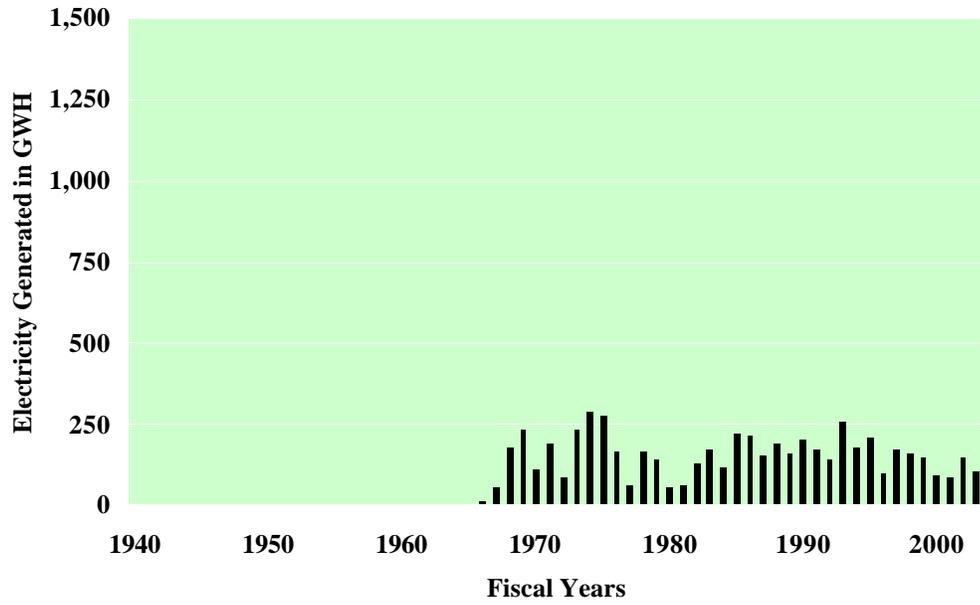
2. **Electricity Generated By Project.** Electricity generated by project for the last five fiscal years (rounded to the nearest GWH) are shown in Table 6.

**TABLE 6**  
**Southwestern Division**  
**Electricity Generated By Project**  
**in (GWH) for**  
**Fiscal Years 1999 to 2003**

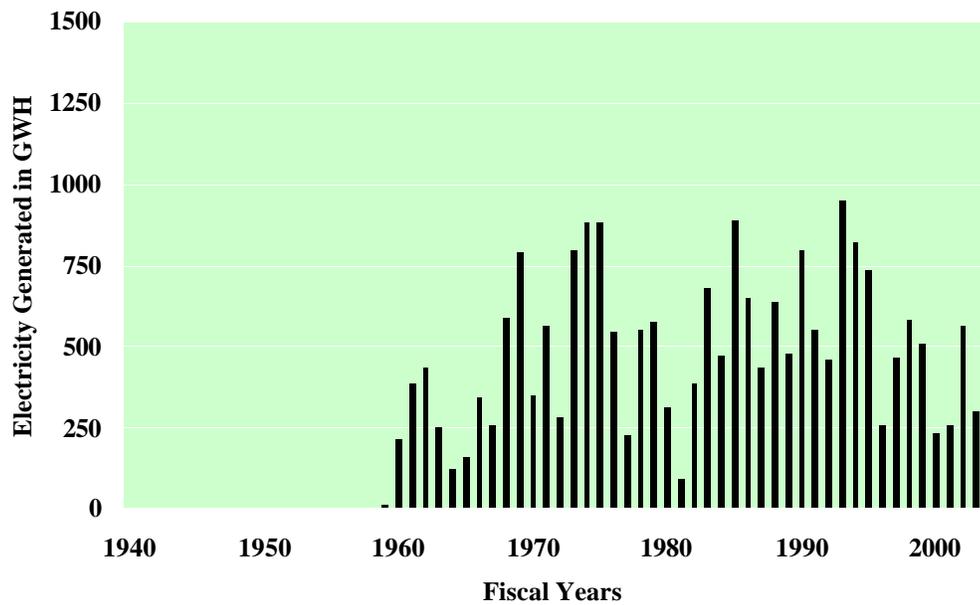
<b>Projects</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Beaver Lake	147.4	90.3	84.9	149.1	105.8
Table Rock Lake	506.8	232.3	259.5	565.8	297.8
Bull Shoals Lake	687.8	301.5	310.9	866.3	419.7
Norfork Lake	149.4	66.5	78.1	254.4	115.7
Greers Ferry Lake	112.1	80.5	89.3	199.0	124.5
Keystone Lake	495.3	324.0	252.4	167.2	252.4
Ft. Gibson Lake	334.7	171.9	149.9	172.3	116.1
Webbers Falls	282.8	228.3	207.5	186.5	213.8
Tenkiller Ferry Lake	159.6	96.0	107.5	121.9	57.7
Eufaula Lake	416.8	216.9	342.8	202.2	99.3
Robert S. Kerr	857.1	570.1	533.6	487.5	453.5
Ozark-Jetta Taylor	214.1	277.2	221.5	177.9	280.2
Dardanelle	364.7	480.3	604.3	625.0	548.6
Denison Dam	181.0	118.0	377.8	193.1	155.3
Broken Bow Lake	204.7	92.6	171.9	201.0	64.0
Lake Sam Rayburn	170.5	55.4	165.0	146.9	156.2
Town Bluff	35.4	36.3	29.3	32.6	40.4
Whitney Lake	13.0	8.3	37.3	30.0	18.6

3. **Hydropower Generation From Impoundment.** Generation by the projects, since impoundment, is depicted by figures 2 through 10 on pages V-3 to V-11.

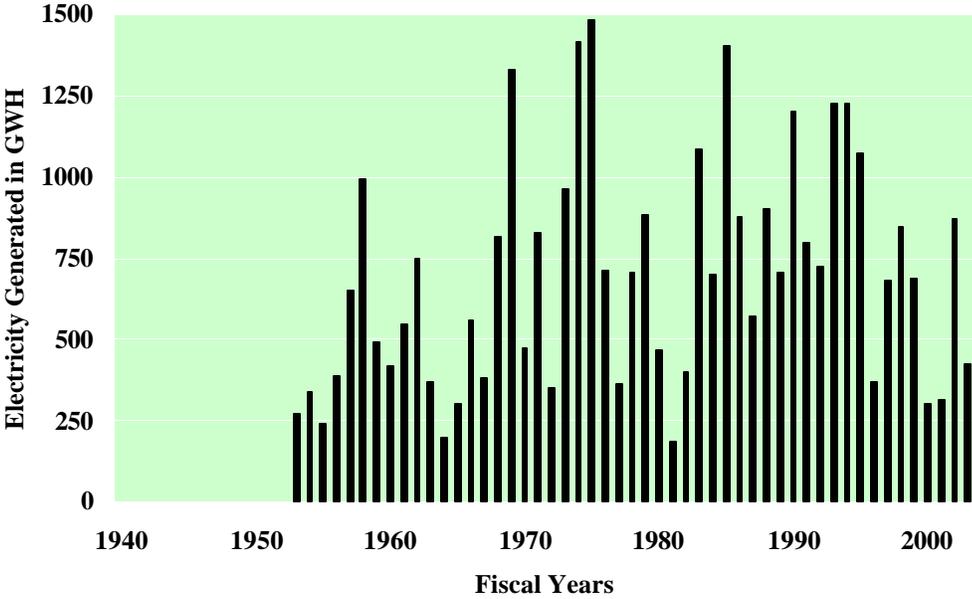
# Beaver Lake



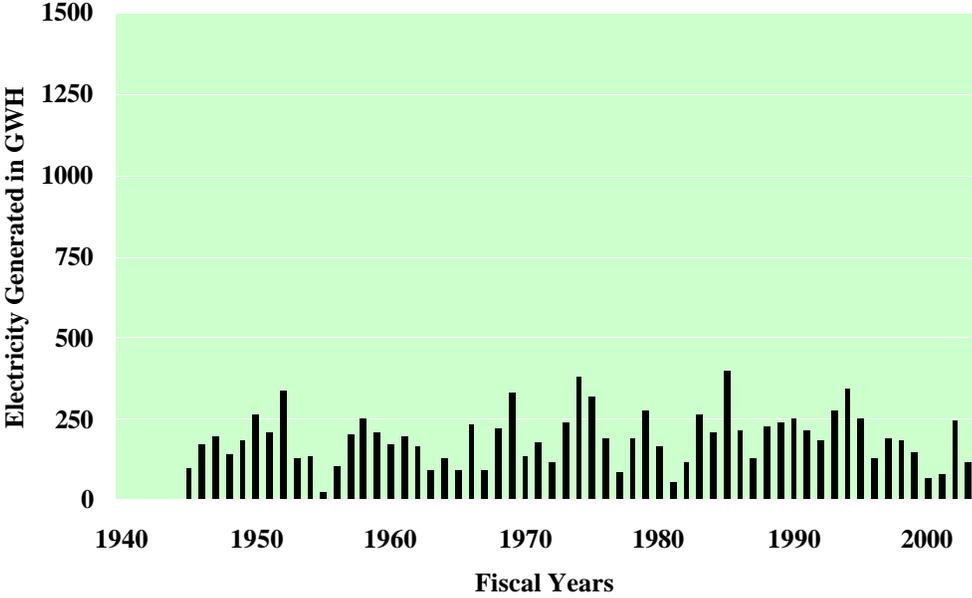
# Table Rock Lake



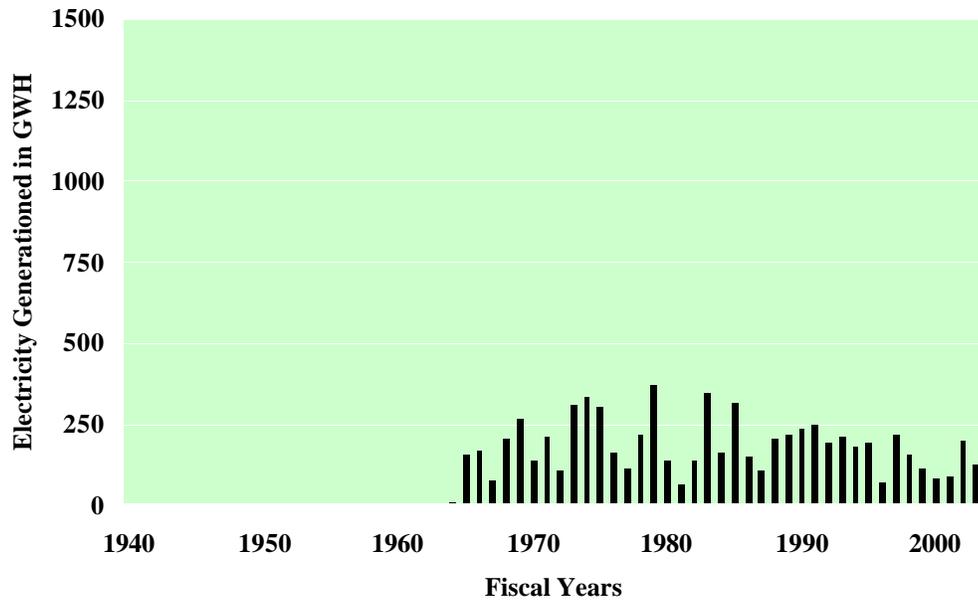
# Bull Shoals Lake



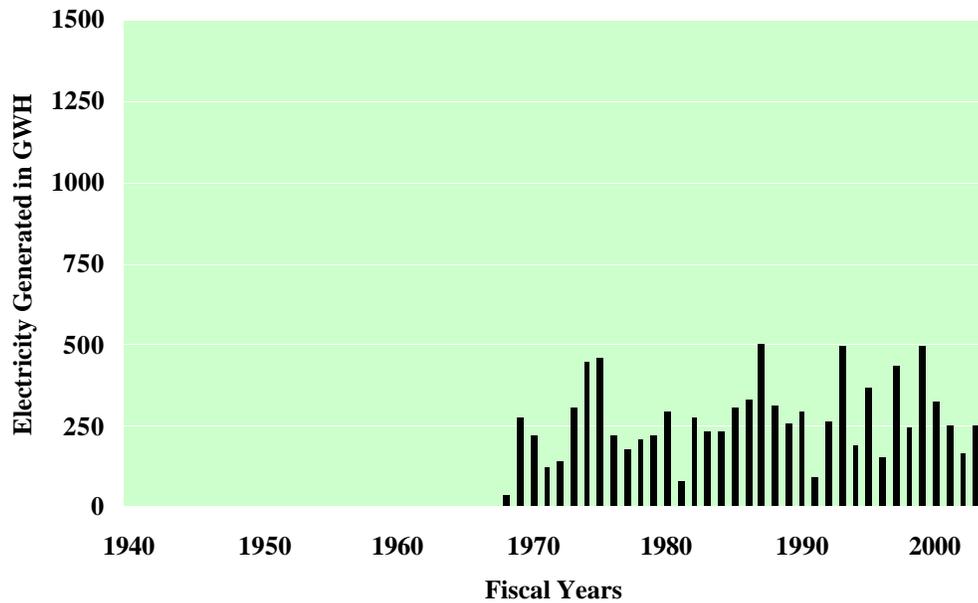
# Norfolk Lake



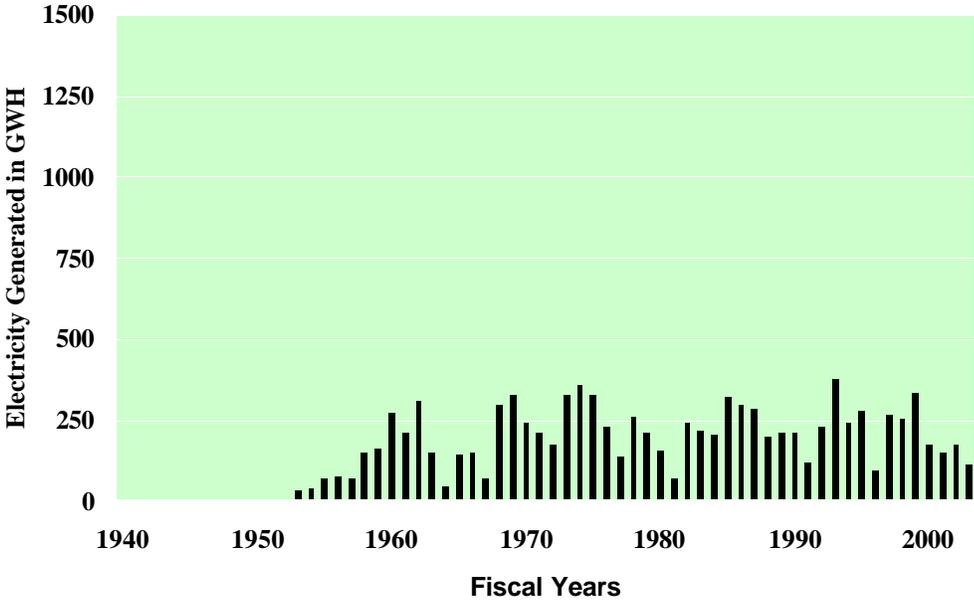
# Greers Ferry Lake



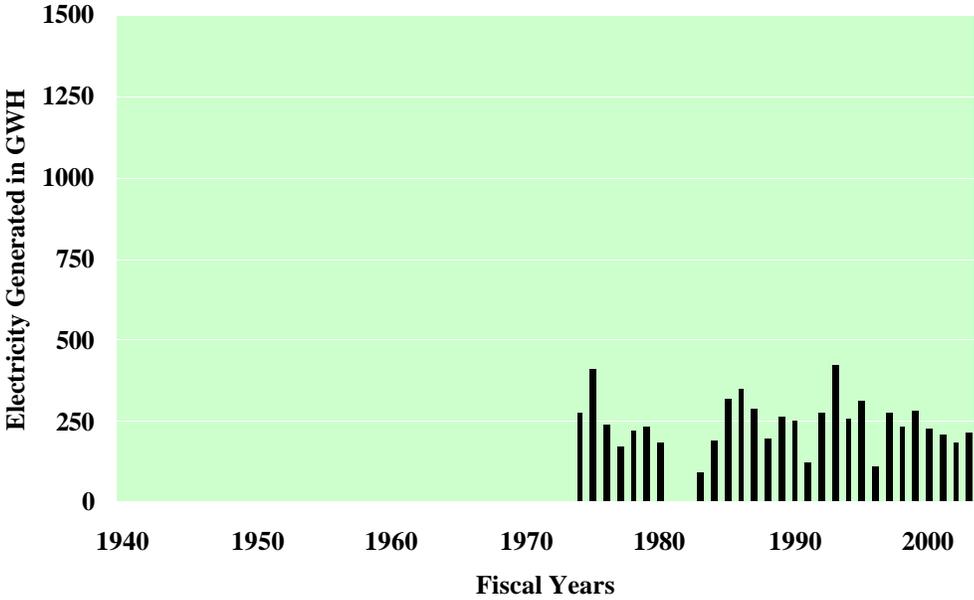
# Keystone Lake



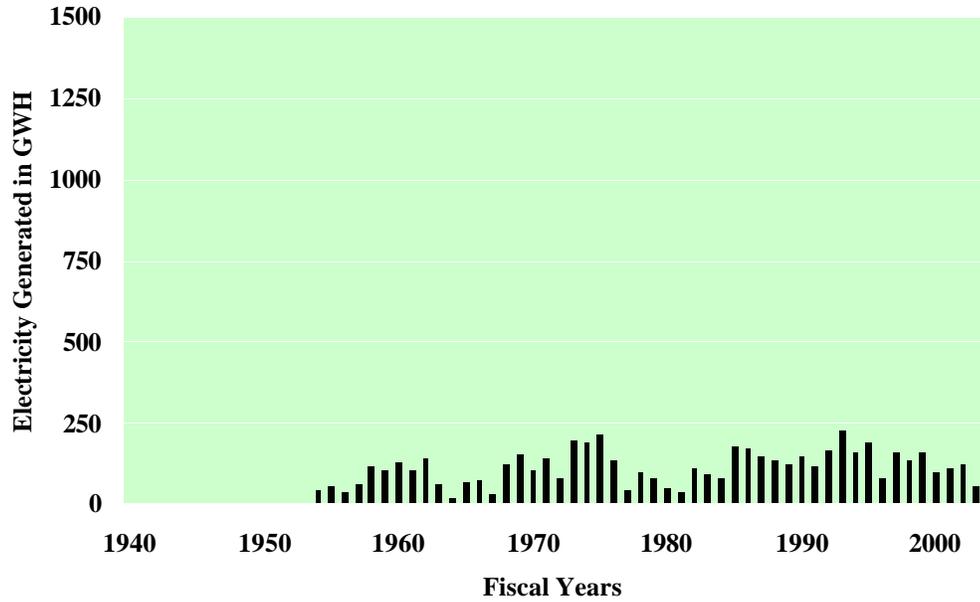
# Fort Gibson Lake



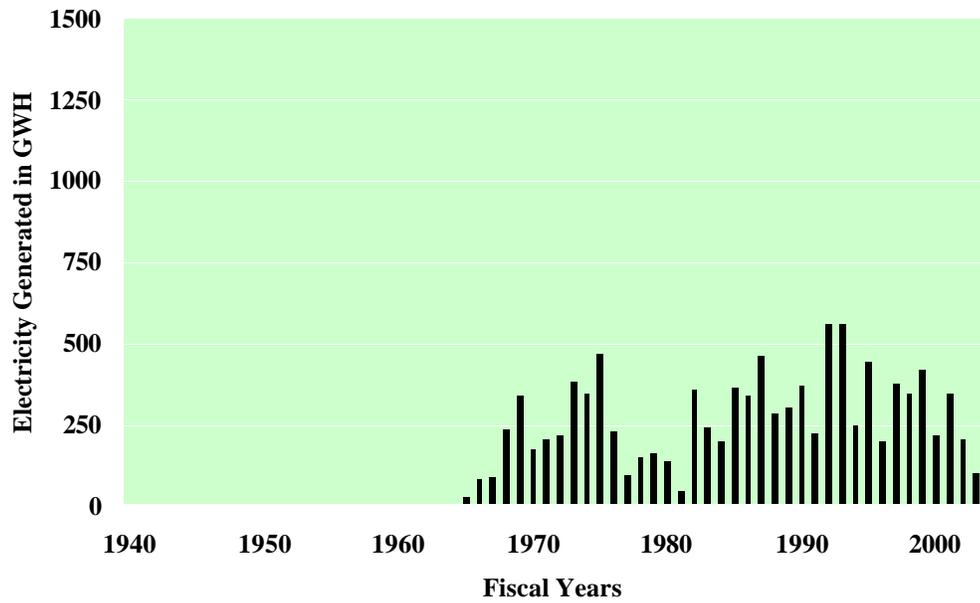
# Webbers Falls



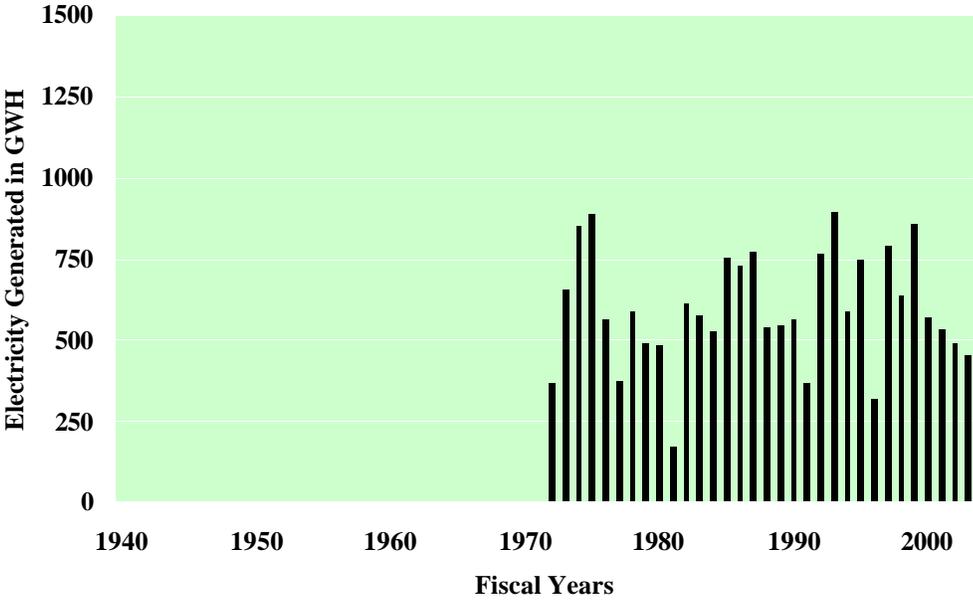
# Tenkiller Ferry Lake



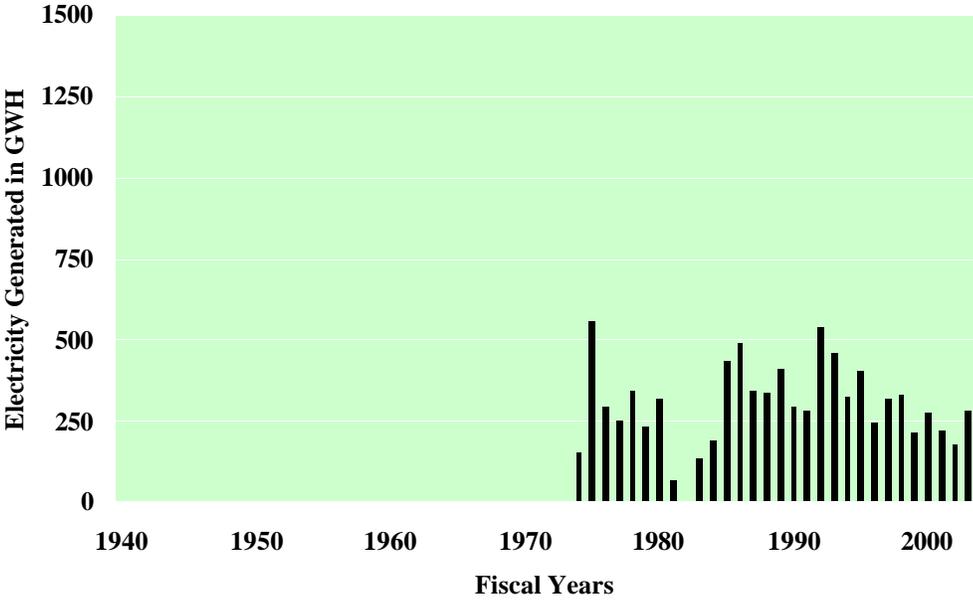
# Eufaula Lake



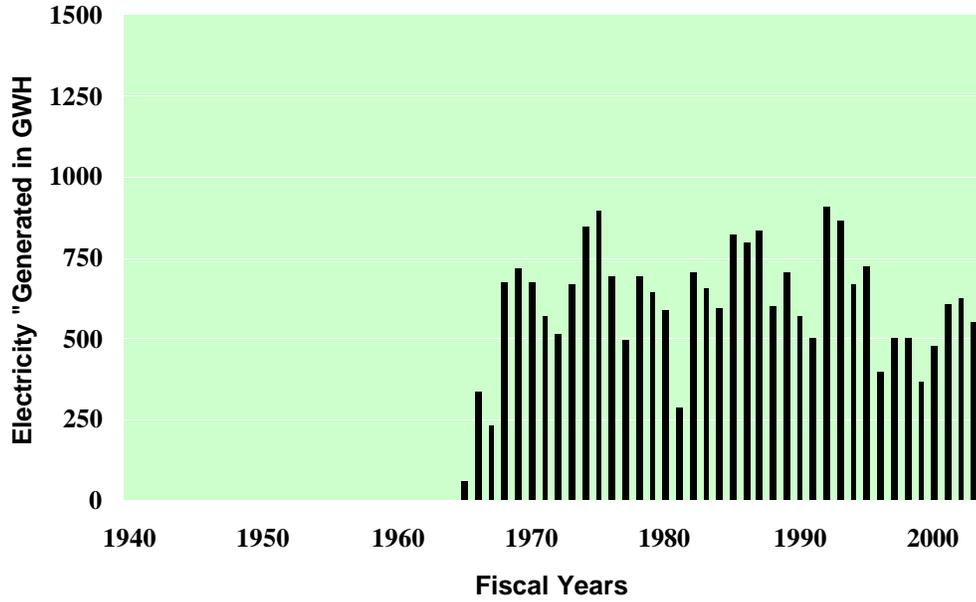
# Robert S. Kerr



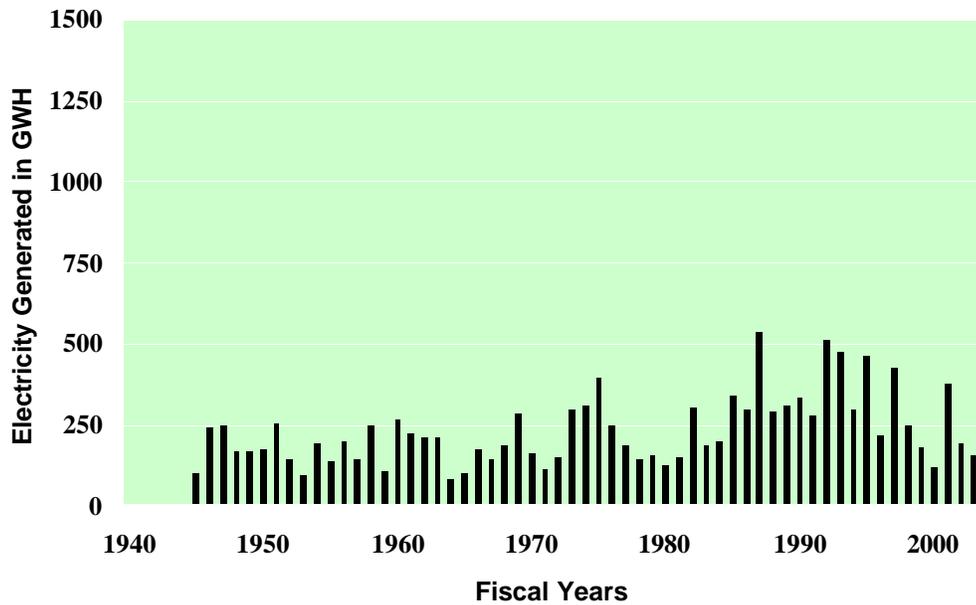
# Ozark-Jetta Taylor



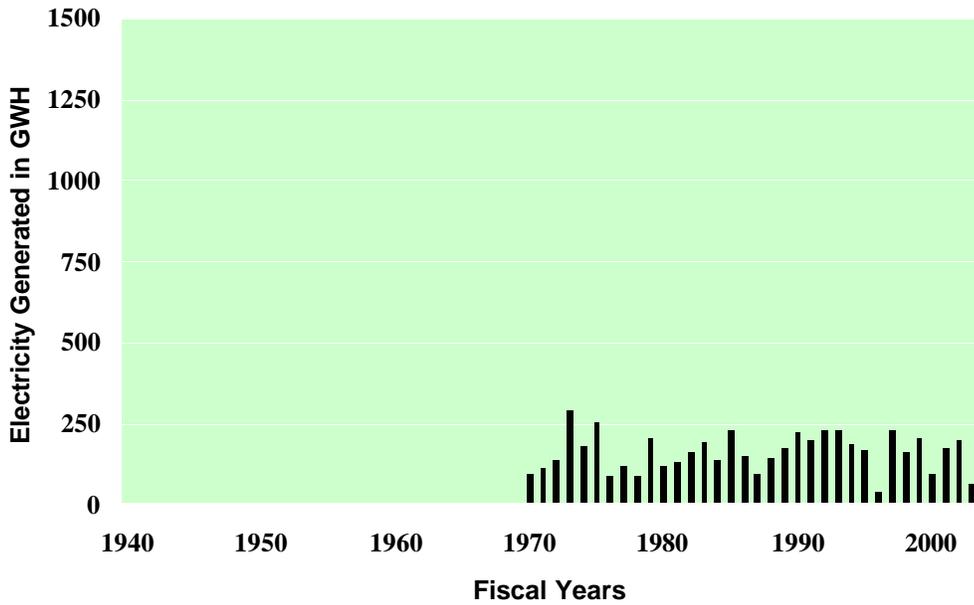
# Dardanelle



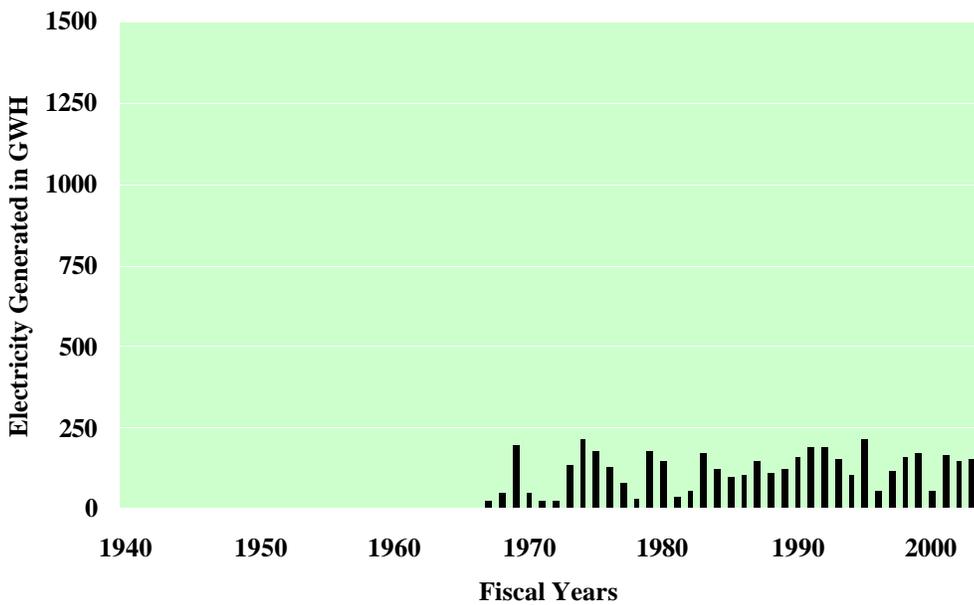
# Denison Dam



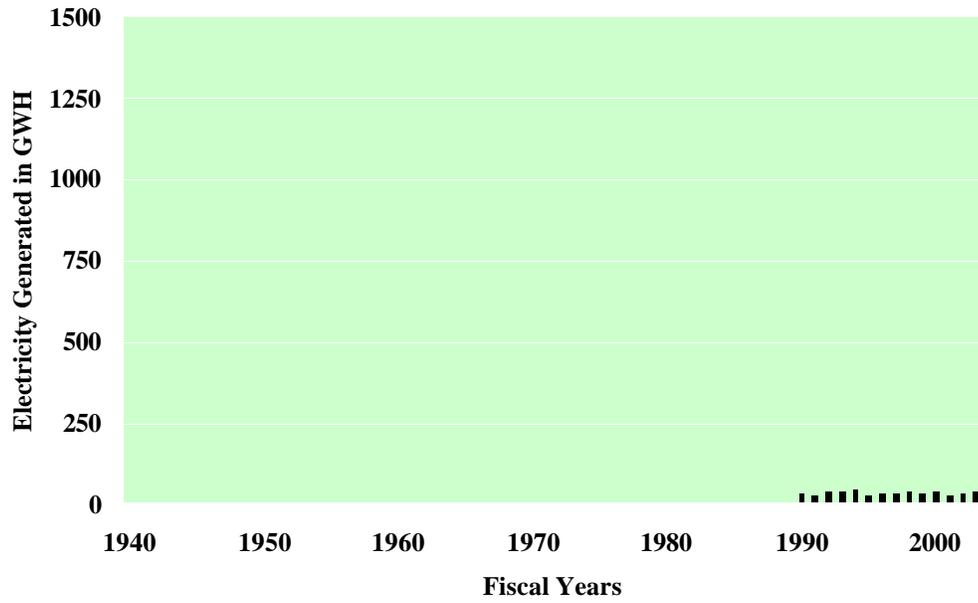
# Broken Bow Lake



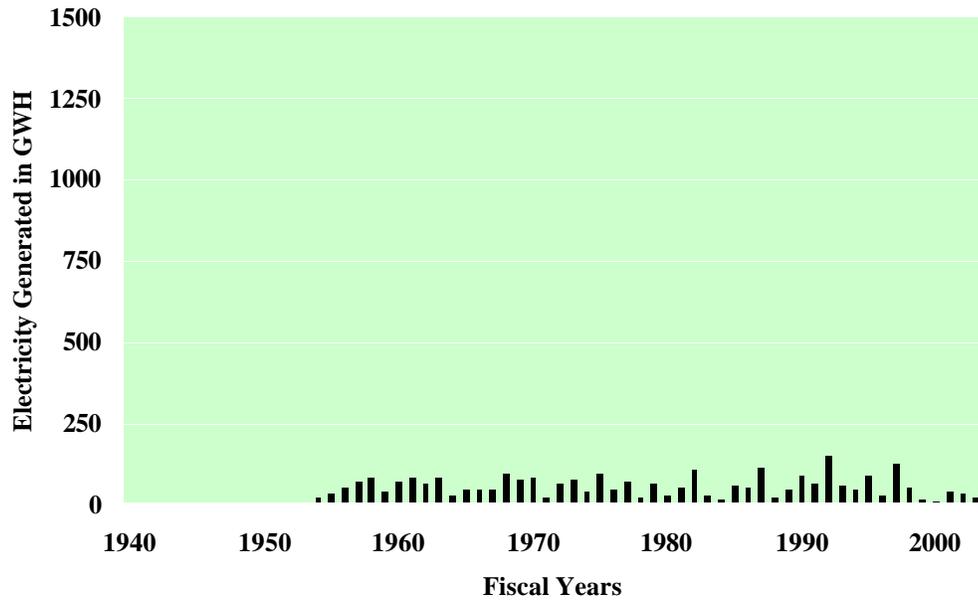
# Lake Sam Rayburn



# Town Bluff



# Whitney Lake



## SECTION VI – FORT WORTH DISTRICT WATER CONTROL ACTIVITIES

### 1. ANNUAL FLOOD DAMAGES PREVENTED PER RIVER BASIN.

Annual flood damages prevented by river basin and project for both Corps' and Section 7 lakes are shown in the following table. Table 7 presents the damages prevented for both FY 2003 and the cumulative through FY 2003.

**Table 7**  
**Fort Worth District**  
**Annual Flood Damages Prevented Through FY 2003**  
**Current Dollars**  
**(Not Adjusted For Inflation)**

PROJECT	FY 2003 DAMAGES PREVENTED	CUMULATIVE BENEFITS THROUGH FY 2003
<b>Brazos River Basin</b>		
Aquilla	2,700	\$ 20,819,200
Belton	767,100	\$ 149,370,500
Georgetown	21,600	\$ 5,613,700
Granger	78,600	\$ 33,106,200
Proctor	91,600	\$ 39,052,300
Somerville	733,000	\$ 66,746,400
Stillhouse	250,700	\$ 39,355,400
Waco	34,500	\$ 117,614,900
Whitney	17,100	\$ 233,374,100
Basin Total	1,996,900	\$ 705,052,700
<b>Colorado River Basin</b>		
Hords Cheek	0	\$ 937,000
O.C. Fisher	0	\$ 2,376,000
Basin Total	0	\$ 3,313,000
<b>Guadalupe-San Antonio River Basin</b>		
Canyon	29,180,500	\$ 328,376,800
San Antonio	0	\$ 117,515,000
Basin Total	29,180,500	\$ 445,891,800

**Table 7**  
**Fort Worth District**  
**Annual Flood Damages Prevented Through FY 2003**  
**Current Dollars**  
**(Not Adjusted For Inflation)**

PROJECT	FY 2003 DAMAGES PREVENTED	CUMULATIVE BENEFITS THROUGH FY 2003
<b>Neches River Basin</b>		
Sam Rayburn	32,535,200	\$ 792,558,700
Basin Total	32,535,200	\$ 792,558,700
<b>Red River Basin</b>		
Cooper	1,973,000	\$ 11,055,500
Lake O'the Pines	291,200	\$ 25,173,200
Wright Patman	0	\$ 13,859,000
Basin Total	2,264,200	\$ 50,087,700
<b>Trinity River Basin</b>		
Bardwell	12,000	\$ 14,009,600
Benbrook	36,706,300	\$ 4,011,248,300
Grapevine	130,977,900	\$ 5,630,629,900
Joe Pool	66,046,300	\$ 1,164,436,300
Lavon	753,200	\$ 241,067,100
Navarro Mills	205,200	\$ 51,865,600
Lewisville		
and Ray Roberts	626,147,000	\$ 23,147,157,600
Basin Total	860,847,900	\$ 34,260,414,400
<b>Colorado River Basin *</b>		
Marshall Ford	35,000	\$ 296,978,600
Twin Buttes	0	\$ 1,118,000
Basin Total	35,000	\$ 298,096,600
Grand Total	926,859,700	\$ 36,555,414,900

\* Built by Bureau of Reclamation but under Corps of Engineers flood control jurisdiction.

## **2. ANNUAL FLOOD DAMAGES, BY STATE, PREVENTED BY CORPS PROJECTS.**

Flood damages prevented by Fort Worth District projects during FY 2003 in the State of Texas was \$926,859,700.

## **3. SPECIAL RESERVOIR OPERATIONS.**

**(a) General.** Moderate to severe flooding occurred throughout FY 2003. Details of flood operations, drought conditions, and deviations from approved Water Control Plans are described in the following paragraphs.

### **(b) Flood Control and Drought Operations.**

**(1) General.** The U. S. Army Corps of Engineers, Fort Worth District, operates twenty-five lakes in the State of Texas. These lakes are located in six major river basins and are operated to provide for flood control, water supply, hydropower, and recreational activities. Three of these lakes are located in the Red River Basin, two in the Neches River Basin, eight in the Trinity River Basin, nine in the Brazos River Basin, two in the Colorado River Basin, and one in the Guadalupe River Basin. The following provides an overview of the flood events and the drought conditions in the District, the impacts on Corps' lakes and some of the coordination that was required.

**(2) Sulphur River Basin.** The Sulphur River Basin is located in northeastern Texas and flows into the Red River. The basin generally experienced below normal to slightly above normal rainfall during FY 2003. Cooper Lake received only 37.45 inches of rainfall during the Fiscal Year, or 16% below normal. Wright Patman Lake received 44.91 inches, or 3% above normal, and Lake O'the Pines received 50.02 inches, or 6% above normal. The inflows into the three lakes varied from 40% below normal at Cooper Lake to 53% below normal at Wright Patman Lake. The inflows into Lake O'the Pines were 50% below normal. There were three floods during FY 2003.

**(3) Neches River Basin.** The Neches River Basin is located in eastern Texas. The basin received above normal rainfall during FY 2003. Sam Rayburn Reservoir received 66.37 inches of rainfall during the Fiscal Year, or 14% above normal. B.A. Steinhagen Lake received 57.07 inches of rainfall, or 13% above normal. The inflows into Sam Rayburn Reservoir and B.A. Steinhagen Lake were 43% and 31% above normal, respectively. There were three floods during FY 2003.

**(4) Trinity River Basin.** The Trinity River Basin contains what may be one of the most complex flood control systems in the country and one of the more challenging to manage. The river and its tributaries flow through two major cities and a mid-cities area of 4.2

million people. The basin's diverse flood protection system includes lakes, levees, channel improvements and local flood protection projects. Although there are eight flood control lakes in the basin, only 33% of the drainage area is controlled. Rainfall within the basin varied from 14% above normal at Grapevine Lake to 12% below normal at Lavon Lake. However, the District Lakes in the basin experienced inflows that varied from 6% below normal at Bardwell Lake to 46% below normal at Ray Roberts Lake. Even so, the basin conservation storage increased slightly from 2,031,500 acre-feet, or 88.2% at the beginning of the year to 2,037,500 acre-feet, or 88.4% at the end of the year. Moderate flooding occurred within the Trinity River Basin throughout the year.

**(5) Brazos River Basin.** The Brazos River Basin is located west of the Trinity River and flows from north central Texas southeasterly to the Gulf of Mexico. The District Lakes in the basin experienced rainfall that varied from 7% below normal at Granger Lake to 32% above normal at Somerville Lake. Inflows into the lakes varied from 79% below normal at Whitney Lake to 140% above normal at Somerville Lake. The basin conservation storage decreased from 1,128,600 acre-feet, or 87% at the beginning of the year to 1,046,500 acre-feet, or 81% at the end of the year. The basin experienced moderate flooding throughout the year.

**(6) Colorado River Basin.** The Colorado River Basin is located west of the Brazos River and flows generally southeasterly to the Gulf of Mexico. The inflow into O.C. Fisher Lake during FY 2003 was only 6,100 acre-feet, or 77% below normal. O.C. Fisher Lake remained in the dead pool for the entire year. Hords Creek Lake received 27.98 inches of rainfall, or 9% above normal for the year. However, the inflow into Hords Creek Lake was only 1,400 acre-feet, or 60% below normal. As a result, the conservation storage in Hords Creek Lake was about 50 acre-feet, or 1% at the beginning of the year and in the dead pool at the end of the year. There were no floods during FY 2003.

**(7) Guadalupe River Basin.** The Guadalupe River Basin, located west of the Colorado River, is one of the smaller basins and only has one flood control lake. Canyon Lake controls only 28 percent of the basin above Victoria, Texas. The Blanco and San Marcos watersheds also generate major runoff. For this reason, controlling flows that pass through Cuero and Victoria is difficult at best and often impossible. Canyon Lake received 40.65 inches of rainfall, or 17% above normal for the Fiscal Year. The inflow into the lake was 451,700 acre-feet, or 37% above normal. There were two floods during FY 2003.

**(c) Deviations from Water Control Plans.** During the year, the Fort Worth District requested two deviations from the approved Water Control Plans for its lake projects. In general, these deviations were requested because of inspections, construction work, spraying for insects, protection of government property, and recreation.

#### 4. HYDROPOWER PRODUCTION.

Hydropower production by project for Fiscal Years 1999 through 2003 is shown in table 8. All values shown below are in units of Gigawatt Hours (GWH).

**Table 8**  
**Fort Worth District**  
**Hydropower Production By Project**  
**For Fiscal Years 1999 Through 2003**  
**(GWH)**

<b>Project</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Sam Rayburn	170.5	57.3	165.0	148.4	157.8
Town Bluff (R.D. Willis)	35.4	36.8	29.3	33.1	40.8
Ray Roberts *	3.6	3.8	2.2	3.1	0
Lewisville *	8.9	3.9	8.0	10.4	0
Whitney	13.0	9.3	37.3	30.7	19.3
Canyon *	16.3	4.8	28.0	13.9	0
<b>Total</b>	<b>247.7</b>	<b>115.9</b>	<b>269.8</b>	<b>239.6</b>	<b>217.9</b>

\* Non-Federal Hydropower Production

#### 5. NAVIGATION ACTIVITIES.

Not applicable

#### 6. WATER SUPPLY STORAGE.

Water supply information by project is shown in table 9.

**Table 9**  
**Fort Worth District**  
**Water Supply Allocations**  
**For Fiscal Years 2002 Through 2003**  
**(Acre-Feet)**

PROJECT	AMOUNT OF STORAGE ALLOCATED	AMOUNT OF STORAGE CONTRACTED	NUMBER OF CONTRACTS (USERS)	AMOUNT SUPPLIED	
				(FY 2002)	(FY 2003)
Aquilla	6,802	6,802	1	3,165	3,687
Bardwell	42,800	42,800	1	4,758	6,196
Belton	372,700	372,700	2	55,076	62,461
Benbrook	72,500	72,500	3	26,427	27,906
Canyon	366,400	366,400	1	19,120	16,752
Cooper	273,000	273,000	3	7,526	63,233
Georgetown	29,200	29,200	1	20,783	19,274
Granger	37,900	5,128	1	2,397	2,488
Grapevine	161,250	161,250	3	51,043	45,572
Hords Creek	5,780	5,780	1	154	143
Joe Pool	142,900	21,435	1	4,521	4,217
Lake O'the Pines	250,000	250,000	1	6,252	8807
Lavon	380,000	380,000	1	246,322	258,362
Lewisville	436,000	436,000	2	154,675	200,553
Navarro Mills	53,200	53,200	1	7,076	7,043
O.C. Fisher	80,400	80,400	1	516	40
Proctor	31,400	31,400	1	7,791	6,294
Ray Roberts	799,600	415,784	2	9,667	12,061
Sam Rayburn	43,000(1)	43,000(1)	2	0	0
Somerville	143,900	143,900	1	3,198	2,830
Stillhouse	204,900	204,900	1	6,688	550
Town Bluff	(1)	(1)	1	1,345,587	1,530,526
Waco	104,100	104,100	2	31,504	32,995
Whitney	50,000	50,000	1	0	0
Wright Patman	216,500(2)	91,263	1	45,882	45,983

(1) LNVA is permitted to withdraw from the Town Bluff project an amount not to exceed 2,000 cfs. This lake acts as a re-regulation dam for Sam Rayburn power releases.

(2) Maximum available under the operating rule curve. The Second contract with the City of Texarkana specifies that storage is based on "total operating rule curve storage space". A third contract with Texarkana supercedes this second contract and is effective when the pool raise is accomplished.

**7. PROJECT VISITATION.**

Project visitation for both the Fort Worth District Corps' lakes and Section 7 lakes is presented in table 10. Visitor hours are presented for the period FY 1999 through FY 2003. Project visitation is extrapolated from the estimated total hours that each visitor spent at each lake.

**Table 10**  
**Fort Worth District**  
**Annual Project Visitation**  
**For Fiscal Years 1999 Through 2003**  
**(1000's Visitor Hours)**

<b>LAKE PROJECT</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Aquilla	208	200	211	296	323
Bardwell	1,297	822	1,012	925	819
Belton	12,478	10,493	12,383	14,384	12,331
Benbrook	5,102	4,653	4,088	4,104	3,697
Canyon	4,987	5,484	4,797	1,962	1,739
Cooper	1,823	1,871	3,445	3,282	3,419
Georgetown	4,222	4,220	4,632	3,640	3,783
Granger	1,141	1,070	1,237	1,513	1,585
Grapevine	4,839	3,602	4,298	6,053	5,587
Hords Creek	2,530	2,485	2,517	2,653	2,621
Joe Pool	5,058	8,726	7,828	6,081	5,015
Lake O'the Pines	7,802	10,112	8,550	7,958	8,520
Lavon	5,436	6,239	5,302	4,570	4,194
Lewisville	13,423	11,508	12,404	11,823	12,605
Navarro Mills	4,665	4,288	2,800	2,069	2,158
O.C. Fisher	3,059	3,661	3,167	4,966	3,615
Proctor	2,326	1,844	2,088	1,782	2,142
Ray Roberts	26,785	22,946	24,073	21,813	21,250
Sam Rayburn	17,377	16,962	16,359	15,071	13,976
Somerville	18,211	16,815	15,599	21,396	19,594
Stillhouse Hollow	2,660	2,230	2,465	2,919	3,038
Town Bluff	4,389	4,796	7,128	4,778	4,739
Waco	4,611	4,076	2,991	2,834	2,814
Whitney	6,190	6,064	5,208	5,838	4,944
Wright Patman	13,033	13,578	10,236	11,005	10,755
Marshall Ford *	---	---	---	---	---
Twin Buttes *	---	---	---	---	---
<b>Total</b>	<b>173,652</b>	<b>168,745</b>	<b>164,818</b>	<b>163,715</b>	<b>155,263</b>

\* These are Section 7 lakes.

## 8. COOPERATIVE PROGRAMS.

(a) **National Weather Service.** The Fort Worth District transferred \$81,423 to the National Weather Service (NWS) during FY 2003. The NWS maintains a total of 132 weather stations incorporated within the reimbursable network program. Rainfall summaries and additional hydrometeorological information are transmitted to the District Office via Automated Field Observations and Services (AFOS).

### (b) **U.S. Geological Survey.**

(1) **General.** The U.S. Geological Survey (USGS) performed operation and maintenance for all stream flow, lake level, and water quality stations within the Fort Worth District. In addition to the cooperative stream-gaging program, the USGS under memorandum of agreement provided operation and maintenance service to the Fort Worth District Data Collection Platform network. The USGS operated 117 stream flow gages and 25 water quality stations in FY 2003. Also, the USGS maintains 94 tipping bucket rain gages at stream flow gages that collect rainfall data at 15-minute intervals.

(2) **Funds.** The total cost of the stream-gaging program and for the operation and maintenance of the Data Collection Platform network program in FY 2003 was \$1,019,775.

## 9. SEDIMENT ACTIVITIES.

The Texas Water Development Board (TWDB) completed volumetric surveys on B. A. Steinhagen, Belton, and Somerville Lakes in fiscal year 2003. The Brazos River Authority (BRA) sponsored Belton, and Somerville Lakes surveys and shared the 50 percent cost of the surveys established by Section 22 of the Water Resources Development Act of 1974. The Lower Neches Valley Authority (LNVA) was the local sponsor for the B. A. Steinhagen Lake volumetric survey and shared the 50 percent cost of the survey.

## 10. WATER CONTROL STAFFING.

**Table 11**  
**Fort Worth District**  
**Water Control Staff**

<b>Name</b>	<b>Org. Code</b>	<b>Position</b>	<b>Phone Number</b>	<b>Grade</b>
Paul Rodman	CESWF-OD-L	Chief, Water Control	817-886-1538	GS-13
Judy Harris	CESWF-OD-L	Support Assistant	817-886-1539	GS-06
Allen Avance	CESWF-OD-L	Hydrologist	817-886-1548	GS-07
Jerry Cotter	CESWF-OD-L	Hydraulic Engineer	817-886-1549	GS-12

**Table 11**  
**Fort Worth District**  
**Water Control Staff**

<b>Name</b>	<b>Org. Code</b>	<b>Position</b>	<b>Phone Number</b>	<b>Grade</b>
Bob Gergens	CESWF-OD-L	Hydraulic Engineer	817-886-1542	GS-12
Fred Jensen	CESWF-OD-L	Hydraulic Engineer	817-886-1543	GS-11
Tom Johnston	CESWF-OD-L	Hydraulic Engineer	817-886-1609	GS-12
Shah Khan	CESWF-OD-L	Hydraulic Engineer	817-886-1541	GS-12
Paul Lauderdale	CESWF-OD-L	Hydraulic Engineer	817-886-1547	GS-11
Jim McClain	CESWF-OD-L	Hydraulic Engineer	817-886-1536	GS-12
Minnie Nickerson	CESWF-OD-L	Hydrologic Technician	817-886-1537	GS-07
Steve Pilney	CESWF-OD-L	Hydraulic Engineer	817-886-1610	GS-12
John Rael	CESWF-OD-L	Hydraulic Engineer	817-886-1545	GS-12
Lynne Rednour	CESWF-OD-L	Hydrologic Technician	817-886-1546	GS-07
Mike Schwind	CESWF-OD-L	Hydraulic Engineer	817-886-1540	GS-12
Rey Sorgee	CESWF-OD-L	Hydrologist	817-886-1544	GS-12

**SECTION VII**

**GALVESTON DISTRICT  
WATER CONTROL ACTIVITIES**

**SECTION VII – GALVESTON DISTRICT WATER  
CONTROL ACTIVITIES**

**1. ANNUAL FLOOD DAMAGES PREVENTED PER RIVER  
BASIN.**

Annual flood damages prevented by basin and project for FY 03 are shown in table 12.

**Table 12  
Galveston District  
Annual Flood Damages Prevented (\$000) Through FY 03  
(Current Dollars)  
Not Adjusted For Inflation**

<b>PROJECT</b>	<b>FY 03 DAMAGES PREVENTED</b>	<b>CUMULATIVE BENEFITS THROUGH FY 03</b>
Taylors Bayou Basin		
Port Arthur (Hurricane –Flood)	204	6,661
San Jacinto River Basin		
Addick & Barker	385,000	2,045,691
Brays Bayou	23	290,193
White Oak Bayou	0	34,054
Vince Bayou	180	18,260
Sims Bayou	0	344,400
Moses Lake		
Texas City, Texas (Hurricane –Flood)	146	10,471
Jones Bay		
Highland Bayou	0	0
Gulf of Mexico		
Galveston Seawall	180	400,585
Old Brazos River Basin		
Freeport (Hurricane –Flood)	340	8,510
Lavaca River Basin		
Hallettsville	0	652
Colorado River Basin		

**Table 12**  
**Galveston District**  
**Annual Flood Damages Prevented (\$000) Through FY 03**  
**(Current Dollars)**  
**Not Adjusted For Inflation**

PROJECT	FY 03 DAMAGES PREVENTED	CUMULATIVE BENEFITS THROUGH FY 03
Matagorda	0	844
Nueces River Basin		
Three Rivers	335	642
San Fernando Creek Basin		
Tranquitas Creek	0	5,333
San Diego Creek	0	2,908
<b>Total</b>	<b>386,228</b>	<b>3,169,204</b>

**2. ANNUAL FLOOD DAMAGES, BY STATE, PREVENTED BY CORPS PROJECTS.**

Annual flood damages prevented by Corps projects during FY 03 in the state of Texas for our district were \$386,228,000.

**3. SPECIAL RESERVOIR OPERATIONS.**

A deviation to reservoir operations was made on 11/07/02 to add another gate foot to Addicks Reservoir. We normally would have put this gate -foot on Barker Reservoir since it has the most storage. Both reservoir appeared to be peaking out. Since we had two to three inches of water on Highway 6 in Addicks Reservoir and with the large volume of traffic using this Highway we added this gate to Addicks just for the night.

A deviation to reservoir operations was requested by Harris County Flood Control District (HCFCD) who was doing some erosion control work on Buffalo Bayou around the Memorial Park area near Shephard Drive when the October storms hit. We had been coordinating with them by phone about the status of our releases. They were unable to complete their repairs. On Thursday, December 12th, Txdot called to inquire if we could close down our releases for a short time to allow them to place a drainage pipe into Buffalo Bayou near Gessner Drive. A subdivision had been experiencing flooding in the area. Both parties requested we close down to allow them to make their repairs. Both reservoirs were closed down on 12/17/02 and then resumed reservoir releases on 12/20/02.

A deviation from the approved Water Control plan for Addicks and Barker Reservoirs was made on 01/8/03 to allow contractors to put in bank protection on Buffalo Bayou in the Houston Country Club area. The Harris County Flood Control District had a contractor also working in the Bayou at the same time. Reservoir releases were resumed on 01/18/03

A deviation from the approved Water Control plan for Addicks and Barker Reservoirs was made on 04/23/03 to store water for the 2003 Buffalo Bayou Regatta. This is an annual request for our assistance to provide water for this canoeing event. Releases were initiated on the afternoon of 05/01/02. Reservoirs were returned to normal operations on 05/05/03.

There were no other significant deviations made during the fiscal year. The reservoirs were not impacted by these deviations.

#### **4. HYDROPOWER PRODUCTION.**

There are no Hydropower projects.

#### **5. NAVIGATION ACTIVITIES.**

Up-to-date navigation statistics are available at web site [www.iwr.usace.army.mil/ndc](http://www.iwr.usace.army.mil/ndc) .

#### **6. WATER SUPPLY STORAGE.**

There is no water supply storage associated with the Galveston Districts projects.

#### **7. LAKE ATTENDANCE.**

Addicks and Barker Reservoirs serve as major recreational areas for the Houston Metropolitan Area. Some of the facilities located in Addicks Reservoir are: baseball fields, soccer fields, private shooting range, 3-18 hole golf courses, veladrome (bicycle track), hike and bike trails, wildlife viewing facility, archery range, petting zoo for the handicapped, Houston Farm and Ranch Club, High School FFA facilities, Harris County Extension Agency building and approximately 2000 picnic tables. There were approximately 1,948,410 visits to these facilities. Barker Reservoir encompasses: baseball fields, soccer fields, a public shooting range, a model airplane airport, dog park, hike and bike trail, Cinco Ranch YMCA facilities and approximately 200 picnic tables. There were approximately 711,072 visits to these facilities. Both reservoir facilities sponsor international and national events. Lake attendance is presented in table 13.

**Table 13**  
**Galveston District**  
**Annual Lake Attendance**  
**For Fiscal Years 1999 Through 2003**  
**(1000's Visitor Hours)**

<b>LAKE PROJECT</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Addicks Reservoir	1,814	4,042	2,921	6,722	5,376
Barker Reservoir	556	56	596	1,623	1,962
<b>Total</b>	2,370	4,098	3,517	8,345	7,338

**8. COOPERATIVE PROGRAMS.**

- a. **National Weather Service.** The cooperative program with the NWS provides for the operation and maintenance of precipitation gages and for the transmission of rainfall summaries. The total program cost for FY 2003 was \$7,985. The total program cost for FY 2004 is estimated at \$7,666.
- b. **U.S. Geological Survey.** Two cooperative programs are currently in existence with the USGS. One provides the operation and maintenance of stream gages and the second provides the operation and minor maintenance for Data Collection Platforms. The total cost of these programs for FY 2003 was \$398,803. The total cost for these programs for FY 2004 is estimated at \$397,950.

**9. SEDIMENT ACTIVITIES.**

A sediment policy was established in 1985 by the District to provide guidance relative to settling basins or alternative control methods on inflowing streams to reduce velocity and essentially preclude the permanent deposition of sediment in the Federally-owned lands of Addicks and Barker Reservoirs.

No inspection of sediment depositions was made during FY 03.

**10. WATER CONTROL STAFFING.**

**Table 14  
Galveston District  
Water Control Staff**

<b>Name</b>	<b>Org. Code</b>	<b>Position</b>	<b>Phone #.</b>	<b>Grade</b>
Charles Scheffler	CESWG-OD-O	Reservoir Operations	409-766-3113	GS-12
Karl Brown	CESWG-OD-O	Reservoir Operations	409-766-3069	GS-12

**SECTION VIII**

**LITTLE ROCK DISTRICT  
WATER CONTROL ACTIVITIES**

## SECTION VIII – LITTLE ROCK DISTRICT WATER CONTROL ACTIVITIES

### 1. ANNUAL FLOOD DAMAGES PREVENTED PER RIVER BASIN.

The annual flood damages prevented by river basin during FY03 in the Little Rock District are shown in table 15.

**Table 15**  
**Little Rock District**  
**Annual Flood Damages Prevented**  
**(Current Dollars)**  
**Not Adjusted For Inflation**

Basin	FY03 Damages Prevented
ARKANSAS RIVER	
Little Rock District projects	\$2,052,400
Tulsa District projects	\$366,500
WHITE RIVER	
Little Rock District projects	\$4,765,200
LITTLE RIVER	
Little Rock District projects	\$163,900
Tulsa District projects	\$2,500
<b>Total Flood Damages Prevented FY03</b>	<b>\$7,350,500</b>

**2. ANNUAL FLOOD DAMAGES, BY STATE, PREVENTED BY CORPS PROJECTS.**

The annual flood damages prevented in each state served by the Little Rock District during FY03 are shown in table 16.

**Table 16  
Little Rock District  
Annual Flood Damages Prevented In Each State  
(Dollars)**

State	FY03 Damages Prevented
ARKANSAS	
Levees, Arkansas River (Little Rock District)	\$1,006,900
Reservoirs, Arkansas River (Little Rock District)	\$1,045,500
Reservoirs, Arkansas River (Tulsa District)	\$366,500
Levees, White River (Little Rock District)	\$1,496,500
Reservoirs, White River (Little Rock District)	\$2,989,500
Reservoirs, Little River (Little Rock District)	\$163,900
Reservoirs, Little River (Tulsa District)	\$2,500
ARKANSAS TOTAL	\$7,071,300
MISSOURI	
Levees, White River (Little Rock District)	\$0
Reservoirs, White River (Little Rock District)	\$279,200
MISSOURI TOTAL	\$279,200
<b>Total Damages Prevented For FY03</b>	<b>\$7,350,500</b>

### **3. SPECIAL RESERVOIR OPERATIONS.**

**a. General.** Rainfall over the Little Rock District in FY2003 was below average in most basins. Rainfall over the White River Basin was 6.5 inches below normal and ranged from 0.8 inches below normal at Norfolk Lake to 15.6 inches below normal at Clearwater Lake. Rainfall over the Arkansas River Basin was 6.1 inches below normal and ranged from 4.2 inches above normal at Toad Suck Ferry (Lock & Dam 8) to 15.8 inches below normal at Blue Mountain Lake. Rainfall over the Little River Basin averaged 11.1 inches below normal and ranged from 8.7 inches below normal at Millwood Lake to 12.9 inches below normal at Dierks Lake.

#### **b. White River System.**

##### **(1) Flood Control Operations.**

(a) In general, total rainfall for the water year was below average at all projects. Specifically, total rainfall for the water year was 9.1 inches below average at Beaver Lake, 8.7 inches below average at Table Rock Lake, 2.8 inches below average at Bull Shoals Lake, 0.8 inches below average at Norfolk Lake, 15.3 inches below average at Clearwater Lake, and 2.0 inches below average at Greers Ferry Lake.

(b) Water Year 2003 began with all five multipurpose projects near their conservation pools. Specifically, Beaver Lake started at elevation 1121.3, 9% flood storage utilized; Table Rock Lake started at elevation 915.0, 93% conservation storage utilized; Bull Shoals Lake started at elevation 655.8, 3% flood storage utilized; Norfolk Lake started at elevation 553.9, 5% flood storage utilized; and Greers Ferry Lake started at elevation 458.5, 88% conservation storage utilized. As releases for project purposes exceeded inflow, all lakes continued to recede and reached their lowest elevations of the water year as follows: Beaver, elevation 1113.5 on 13 February with 80% conservation storage utilized; Table Rock, elevation 909.4 on 13 February with 80% conservation storage utilized; Bull Shoals, elevation 649.7 on 7 February with 81% conservation storage utilized; Norfolk, elevation 545.4 on 13 February with 80% conservation storage utilized; and Greers Ferry, elevation 452.5 on 17 December with 63% conservation storage utilized. With significant rainfall occurring in March and April 2003 all lakes experienced rises and reached their conservation pool elevations in early to mid May 2003. Near to above normal rainfall in May and June 2003 caused all lakes to continue to rise but as seasonal pools commenced on 1 May flood pool usage was minimal. All lakes rose and reached their highest elevations of the water

year as follows: Beaver, elevation 1122.5 on 22 May with 12% flood storage utilized; Table Rock, elevation 917.0 on 26 May with 100% conservation storage utilized; Bull Shoals, elevation 657.3 on 3 June with 100% conservation storage utilized; Norfolk, elevation 555.1 on 6 June with 100% conservation storage utilized; and Greers Ferry, elevation 467.9 on 27 May with 22% flood storage utilized. The flood pools at Beaver and Greers Ferry were evacuated promptly and all projects were at or below their seasonal pools by mid July 2003. As releases for project purposes continued to exceed inflow all lakes ended the water year in their conservation pools utilizing an average 74% conservation storage utilized.

- (c) Clearwater Lake during FY 2003 did not experience any major rises. The maximum pool elevation during this period was 504.46 on April 28, 2003, utilizing only 5% of the flood control storage available. Rainfall on the basin for the year was 29.2 inches, which is 66% of average.

## **(2) Low Dissolved Oxygen Impacts To Hydropower Releases.**

- (a) **General.** Reduced hydropower generation capacity continued at three of the five multipurpose projects during Water Year 2002 (the 2002 Low D.O. season) and into Water Year 2003. Maximum generation rates, recommended to the Southwestern Power Administration with the goal of maintaining dissolved oxygen in the hydropower releases at or above 4.0 parts per million, were discontinued at Table Rock on 26 November 2002; at Bull Shoals on 13 November 2002; and at Norfolk on 26 November 2002. Oxygen depletion in the lower levels of the lakes impact generation capacity until lake turnover, on average occurring in early December, as was the case during Water Year 2002. Also during Water Year 2003 (the 2003 Low D.O. season) hydropower generation capacity was reduced at one of the five multipurpose projects. Generation rates less than nameplate capacity were recommended beginning on 30 September at Norfolk. These recommendations occurred about the same time of year as experienced in the past. The Southwestern Power Administration voluntarily complied with all recommendations.
- (b) **Plan of Operation for the 2003 Low Dissolved Oxygen Season.** The Ad Hoc Committee on Project Operations, White River, Arkansas, developed a Plan of Operation for the 2003 Low Dissolved Oxygen Season, White and North Fork Rivers, Arkansas dated April 2003 and an Operational Action Plan for the 2003 Low Dissolved Oxygen Season, Table Rock Lake, White River also dated April 2003. Actions outlined in the plans were aimed at maintaining a minimum 4.0 parts per million dissolved oxygen in the hydropower releases. These actions primarily consisted of blocking open turbine vents, spreading

power loading across all available units, reducing the maximum loading of each unit, and injecting liquid oxygen.

(c) **Dissolved Oxygen and Temperature Monitoring Program.** In Water Year 2003, the dissolved oxygen and temperature monitoring program consisted of near-monthly lake profiles (dissolved oxygen and water temperature), from March through lake turnover, taken just upstream of the penstocks. Additional profiles were taken at Table Rock, Bull Shoals, and Norfolk Lakes during the period of rapid change in dissolved oxygen concentration. Real time data was collected from both COE and USGS dissolved oxygen and/or temperature gages at Beaver (tailwater), Table Rock (tailwater), School of the Ozarks (approximately 5 miles downstream of Table Rock Dam), Bull Shoals (unit 4 and 5 penstocks and left and right banks tailwater), Fairview (approximately 3 miles downstream of Bull Shoals Dam), Norfolk (unit 1 penstock and tailwater), Calico Rock (approximately 17 miles downstream of the confluence of the White and North Fork Rivers), Sylamore (approximately 34 miles downstream of the confluence of the White and North Fork Rivers), Greers Ferry (tailwater), and Pangburn (approximately 22 miles downstream of Greers Ferry Dam).

(d) **Low Dissolved Oxygen Impacts to Flood Control Operations.** There were no impacts to flood control operations during Water Year 2003 due to low dissolved oxygen.

**(3) Deviations.**

(a) **White River.** There were two deviations to the water control plan at the White River multipurpose projects in Water Year 2003 as follows: the seasonal pool at Greers Ferry was changed to elevation 462.5 from 1 April to 30 September 2003 as an operational adjustment to offset hydropower losses associated with water supply reallocations and flood control releases were curtailed at Greers Ferry on 7 June 2003 to provide conducive releases for the Arkansas Game and Fish Commission's annual Kid's Fishing Derby.

(b) **Clearwater.** A deviation to raise the seasonal top of conservation pool from elevation 498 to 500 was authorized from May 1, 2003 through September 30, 2003 in order to alleviate boating hazards.

**c. Arkansas River System.**

(1) **General.** Rainfall for this water year on the Arkansas River Basin in Arkansas was below the yearly averages (38 to 52 inches) at all projects except Ormond, Toad

Suck, and Mills Locks and Dams. However, rainfall averages at these three projects were only 3 to 11 percent above average. Nimrod and Lock and Dam 5 received normal rainfall while all other projects were at 60 to 90 percent of normal rainfall. On a monthly basis, the wettest month was June at about 150 percent of average while January was an exceptionally dry month with rainfall at 16 percent of average. On a seasonal basis, January through April was drier than normal as rainfall was at 60 percent of average.

Flows at James W. Trimble L&D were 50 percent of average at 19,600 cfs, at Murray L&D flows were 48 percent of average at 23,000 cfs, and at Wilbur D. Mills Dam flows were 51 percent of average at 25,800 cfs. There were five flood events occurring in October-November, March, April, June-July, and August, in which economic benefits were run. The peak flow at James W. Trimble L&D (Van Buren) was 89,800 cfs and occurred on 17 May. Also, for the year, flows were above 100,000 cfs for 0 days and between 70,000 and 100,000 cfs for 3 days. The peak flow at Murray L&D (Little Rock) was 143,800 cfs and occurred on 20 May. For the year, flows were above 100,000 cfs for 2 days, and between 70,000 and 100,000 cfs for another 14 days. The peak flow at Wilbur D. Mills L&D was 132,400 cfs occurring on 21 May with flows above 100,000 cfs for 3 days, between 70,000 and 100,000 cfs for 21 days. There were no lock outages on the system from high water. Lock 6 and Ozark Lock were out for scheduled maintenance from 25 August through 27 August and 2 September respectively.

## **(2) Flood Control Operations.**

- (a) Blue Mountain Lake.** During FY 2003 Blue Mountain Lake did not experience any major rises. The maximum pool elevation during this period was 388.58 on February 18, 2003, utilizing only 6% of the flood control storage available. Rainfall on the basin for the year was 33.4 in. which is 68% of average.
- (b) Nimrod Lake.** During FY 2003 Nimrod Lake did not experience any major rises. The maximum pool elevation during this period was 353.22 on May 21, 2003, utilizing only 17% of the flood control storage available. Rainfall on the basin for the year was 42.1 in. which is 81% of average.

## **(3) Deviations.**

- (a) Mainstem.** There were no deviations to the Water Control plan of the Arkansas River in SWL during FY03.
- (b) Blue Mountain Lake.** There were no deviations during FY 2003.

(c) **Nimrod Lake.** There were no deviations during FY 2003.

**d. Little River System.**

- (1) **General.** Rainfall over the Little River Basin for FY 2003 was approximately 11.0 inches below the annual average. There were eight months of the year where rainfall was below average with November being the driest month at 4.0 inches below normal. Above average rainfall did occur in October, December, February, and June. The wettest month was June at 1.6 inches above normal.
- (2) **Flood Control Operations.** This year there were five minor rises using less than 12 percent of flood storage. The largest rise occurred in January with DeQueen, Gillham, and Dierks lakes all utilizing near 12 percent of their flood control storage. The year ended with a typically dry fourth quarter in which all of the Tri-Lakes pools declined below conservation level.
- (3) **Deviations.** In FY 2003 there were nine deviations to the water control plan at the Tri-lakes and Millwood projects. The first two deviations, in October 2002, were to provide releases for canoe safety classes below Gillham and Dierks Dams. This is an annual event sponsored by the Tarrant County College in Fort Worth, Texas. There were three deviations for minimum releases to provide water for Hooked on Fishing-Not on Drugs Fishing Derbies. The first two were at DeQueen in November and April and the third was at Dierks in May 2003. There was also a Take a Kid Fishing Derby at DeQueen in May where a minimum release was provided. Another deviation that occurred in November 2002 was for all gates to be closed at Gillham to facilitate the repair of a gate indicator. Also at Millwood a deviation was granted for maintenance to the spillway gages in April. The last deviation for FY 2003 was a request from the Arkansas Game and Fish Commission to lower the lake at Dierks 9 feet below the conservation pool (elev. 517.0) from September 2003 to March 2004 to benefit the fish habitat in the lake. Undesirable fish will be killed to help improve the more desirable fish population.

#### **4. HYDROPOWER PRODUCTION.**

The annual net hydropower production at Little Rock District plants in total GWH by fiscal year is shown in table 17.

**Table 17**  
**Little Rock District**  
**Hydropower Production By Project**  
**For Fiscal Years 1999 Through 2003**  
**(GWH)**

<b>Project</b>	<b>FY 99</b>	<b>FY 00</b>	<b>FY 01</b>	<b>FY 02</b>	<b>FY03</b>
Beaver	147.4	90.3	84.9	149.1	105.8
Table Rock	506.8	232.3	259.5	565.8	297.8
Bull Shoals	687.8	301.5	310.9	866.3	420.0
Norfolk	149.4	66.3	78.1	245.4	115.7
Greers Ferry	112.1	80.4	89.2	199.0	124.5
Ozark	214.1	277.2	221.5	181.0	279.7
Dardanelle	364.7	480.3	604.0	625.0	548.6
<b>TOTALS</b>	<b>2182.4</b>	<b>1528.3</b>	<b>1648.1</b>	<b>2831.6</b>	<b>1892.1</b>

#### **5. NAVIGATION ACTIVITIES.**

Up-to-date navigation statistics are available at web site <http://www.iwr.usace.army.mil/ndc/>.

**6. WATER SUPPLY STORAGE.**

Water supply allocations, contracts, and usage for FY 02 and FY 03 are shown, by project, in table 18.

**Table 18  
Little Rock District  
Water Supply Allocations  
For Fiscal Years 2002 Through 2003  
(Acre Feet)**

PROJECT NAME	AMOUNT OF STORAGE ALLOCATED	AMOUNT OF STORAGE CONTRACTED	NUMBER OF CONTRACTS (USERS)	AMOUNT SUPPLIED	
				(FY 02)	(FY 03)
Beaver	108,000	129,151	4	64,559	65,740
Table Rock	0.00	95	1	0	0
Bull Shoals	0.00	880	1	893	897
Norfolk	0.00	2,400	1	3,987	3,480
Greers Ferry	0.00	10,839	8 <sup>2</sup>	6,885	7,174
Blue Mountain	0.00	1,550	1	0	0
Nimrod	0.00	143	2	92	90
Dequeen	17,900	17,900 <sup>1</sup>	1	508	490
Gillham	20,600	20,600	1	1,407	1,302
Dierks	10,100	10,100	1	344	352
Millwood	150,000	150,000	1	74,230	74,841

<sup>1</sup> Only 610 acre-feet of the authorized water supply storage is under agreement.

<sup>2</sup> City of Heber Springs is authorized to use 0.835 million gallons per day of Greers Ferry Lake for water supply due to relocation of its water supply intake from its original site.

## 7. LAKE ATTENDANCE.

Annual lake attendance at all LRD projects is shown in table 19.

**Table 19**  
**Little Rock District**  
**Annual Lake Attendance**  
**For Fiscal Years 1999 Through 2003**  
**(1000's Visitor Hours)**

	1999	2000	2001	2002	2003
<b>Total</b>	152,368	149,868	154,086	155,665	155,795

## 8. COOPERATIVE PROGRAMS.

- a. **National Weather Service.** The Little Rock District has a cooperative agreement with the National Weather Service Cooperative FC-16 Network for 64 rainfall reporting stations. Of these 64 stations, 20 are in the NWS Central Region Cooperative FC-16 Network and 44 are in the NWS Southern Region. Reports from these stations are used in forecasting stream flows for flood warnings and operation of reservoir projects. The FY2003 total operational and maintenance cost for the NWS/COE cooperative program was \$40,517. The FY 2004 operation and maintenance cost of the cooperative program is projected to be \$34,092.
- b. **U.S. Geological Survey.** The Little Rock District also has a cooperative agreement with the United States Geological Survey for stream gage data from 64 stations. During FY2003, 66 DCP stations were operated cooperatively by the USGS with the Corps. The FY2003 cost for the cooperative program with the USGS for the collection of stream flow data was \$561,620. In FY2004 the projected cost of the cooperative program is \$517,765 of which \$140,955 is with the USGS in Missouri and \$376,810 with the USGS in Arkansas.

## 9. SEDIMENT ACTIVITIES.

- a. **Arkansas River.** The last time funding was available to obtain sediment ranges was in FY 2001. The within-channel portions of the 247 sediment ranges on the mainstem of the Arkansas River are resurveyed periodically. In FY 2001 within-channel portions of sediment ranges were obtained in Pools 2, 3, 4, 5, 6, and below Dam #2.

- b. Lakes.** Sediment ranges were obtained for 4 of the 12 SWL lakes during FY 2001; Millwood, Dierks, DeQueen and Gillham Lakes.
- c. Channel Maintenance.** Dredging of approximately 1,167,000 cubic yards was required in FY03. A contract dredge accomplished the dredging. Areas that required dredging included Pools 2, 3, 4, 5, 7, 9, Lake Dardanelle, Ozark Lake and the White River Entrance Channel. Government plant clammed approximately 5,500 cubic yards in Pool 7. Navigable depths were maintained following periods of high flows on the Arkansas River and during periods of low stages on the White River Entrance Channel/Mississippi River.

## **10. WATER CONTROL STAFFING.**

**Table 20  
Little Rock District  
Water Control Staff**

<b>Name</b>	<b>Org. Code</b>	<b>Position</b>	<b>Phone #.</b>	<b>Grade</b>
Jan Jones	CESWL-OP-R	Chief, Water Control	501-324-6235	GS-13
John Kielczewski	CESWL-OP-R	Reservoir Operations	501-324-6238	GS-13
Chris Reicks	CESWL-OP-R	Computer Processing	501-324-6239	GS-12
Mike Black	CESWL-OP-R	Computer Processing	501-324-6238	GS-12
Steve Brewer	CESWL-OP-R	Reservoir Operations	501-324-6239	GS-12
Kevin Fagot	CESWL-OP-R	Reservoir Operations	501-324-6239	GS-12
Jim Cia	CESWL-OP-R	Reservoir Operations	501-324-6236	GS-11
Ken Rollins	CESWL-OP-R	Reservoir Operations	501-324-6237	GS-11
Scott Walker	CESWL-OP-R	Engineering Intern	501-324-6236	GS-09
Chris Burroughs	CESWL-OP-R	Engineering Intern	501-324-6236	GS-07
Darrel Campbell	CESWL-OP-R	DCP Maintenance	501-324-5656	GS-09
Tim Crownover	CESWL-OP-R	DCP Maintenance	501-324-5656	GS-08

**SECTION IX**

**TULSA DISTRICT WATER CONTROL ACTIVITIES**

## SECTION IX – TULSA DISTRICT WATER CONTROL ACTIVITIES

### 1. ANNUAL FLOOD DAMAGES PREVENTED PER RIVER BASIN.

The annual flood damages prevented by river basin during FY03 in the Tulsa District are shown in table 21.

**Table 21**  
**Tulsa District**  
**Annual Flood Damages Prevented Through FY 03**  
**(Current Dollars)**  
**Not Adjusted For Inflation**

PROJECT	FY 03 DAMAGES PREVENTED	CUMULATIVE BENEFITS THROUGH FY 03
Arkansas River Basin		
Arcadia	\$800	\$7,743,800
Big Hill	\$695,700	\$30,291,300
Birch	\$684,300	\$61,665,900
Canton	\$39,200	\$14,244,100
Cheney	\$622,900	\$24,326,700
Copan	\$12,012,900	\$373,982,200
Council Grove	\$421,000	\$72,955,900
El Dorado	\$208,400	\$113,056,600
Elk City	\$3,420,100	\$162,586,300
Eufaula	\$235,400	\$176,588,000
Fall River	\$3,653,500	\$136,008,900
Ft Gibson	\$83,300	\$111,607,900
Fort Supply	\$3,500	\$4,261,000
Great Salt Plains	\$2,388,100	\$73,275,700
Halstead KS Levee	\$0	\$4,583,000
Heyburn	\$3,600	\$25,578,000
Hulah	\$28,921,400	\$590,917,800
Iola Levee	\$0	\$15,924,000
John Redmond	\$2,863,800	\$295,664,900
Jenks Levee	\$0	\$2,618,000
Kaw	\$713,700	\$399,863,500
Keystone	\$422,700	\$586,933,400

**Table 21**  
**Tulsa District**  
**Annual Flood Damages Prevented Through FY 03**  
**(Current Dollars)**  
**Not Adjusted For Inflation**

<b>PROJECT</b>	<b>FY 03 DAMAGES PREVENTED</b>	<b>CUMULATIVE BENEFITS THROUGH FY 03</b>
Marion	\$316,800	\$142,909,100
Markham Ferry (Hudson)	\$33,700	\$39,238,200
Oologah	\$8,975,700	\$314,059,000
Optima	\$0	\$11,000
Pensacola	\$84,100	\$104,120,100
Sanford	\$0	\$163,000
Skiatook	\$7,770,800	\$202,216,700
Tenkiller	\$28,800	\$75,671,400
Thunderbird (Norman)	\$3,200	\$35,703,200
Toronto	\$2,789,400	\$143,354,600
Tulsa/West Tulsa Levee	\$0	\$278,917,000
Wister	\$687,400	\$185,695,000
Wichita/Valley Center	\$0	\$94,971
Basin Total	\$78,084,200	\$4,901,942,600
Red River Basin		
Altus	\$275,000	\$11,291,000
Arbuckle	\$0	\$1,767,000
Broken Bow	\$2,700,000	\$28,225,000
Denison	\$0	\$178,380,000
Fort Cobb	\$4,000	\$5,338,000
Foss	\$0	\$7,069,000
Hugo	\$13,000	\$36,755,000
Lake Kemp	\$0	\$19,238,000
Mountain Park	\$0	\$1,228,000
McGee Creek	\$0	\$2,504,000
Pat Mayse	\$601,000	\$10,857,000
Pine Creek	\$300,000	\$28,295,000
Sardis	\$0	\$31,699,000
Waurika	\$1,996,000	\$64,697,000
Basin Total		\$427,354,000

**2. ANNUAL FLOOD DAMAGES, BY STATE, PREVENTED BY CORPS PROJECTS.**

The annual flood damages prevented in each state served by the Tulsa District during FY03 are shown in table 22.

**Table 22  
Tulsa District  
Annual Flood Damages Prevented In Each State  
(Current Dollars)  
Not Adjusted For Inflation**

<b>STATE</b>	<b>FY 03 DAMAGES PREVENTED</b>
Oklahoma	\$65,074,000
Kansas	\$14,932,000
Texas	\$ 601,000
Arkansas	\$2,866,000
<b>Total</b>	<b>\$83,473,000</b>

- **FY 03 damages prevented by reservoirs alone = \$ 83,473,000**

**3. SPECIAL RESERVOIR OPERATIONS.**

Average flows on the Arkansas River at W.D. Mayo Lock and Dam were about 48% of normal. Average flows on the Red River were estimated to be about 42% of normal. Very dry conditions persisted in Southeast Oklahoma. Least Tern operations required significant attention in FY 2003.

**Least Tern Operations**

A District Least Tern Committee was formed in the fall of 2001. This committee is comprised of members from the Corps of Engineers, Southwestern Power Administration, United States Fish and Wildlife Service, Oklahoma Department of Wildlife Conservation, and the Oklahoma Municipal

Power Authority. The committee developed Management Guidelines to assist in making decisions concerning the protection of the Least Terns. Special operations were necessary in 2003 for a number of basins in support of the Endangered Species Act.

- a. **Red River System.** A meeting was held in the Tulsa District office on June 9, 2003 between representatives from the USFWS, ODWC, and the Tulsa District Corps to discuss lake levels and releases at lakes Kaw, Keystone, Eufaula, and Texoma. From this meeting the minimum flow requirement at Lake Texoma was determined to be both units (9,000 cfs) for 8 hours and 3 times per week. Beginning June 13<sup>th</sup>, the requirement was to run both units for 12 hours on Mondays and Fridays. A heavy rainfall occurred on June 26<sup>th</sup> with up to 4 inches of rain over the Blue and Boggy basins downstream. This resulted in a rise of over 4 feet at the Arthur City gauge. This event likely flooded most of the nests in the reach below the mouth of the Blue River. Beginning July 3<sup>rd</sup>, the requirement was to generate with 1 unit from 1pm to 1am for the Fourth of July weekend and following weekends. This was an attempt to minimize ATV traffic on the islands in the Highway 78 area during weekend daylight hours. Low flow requirements were discontinued on July 25<sup>th</sup>
- b. **Arkansas River System.** The maximum flow reached at the Tulsa gage during this reporting period was 20,900 cfs with a stage of 6.64 feet on May 28, 2003. The maximum flow reached at the Kaw Lake tailwater gage during this reporting period was 10,800 cfs with a stage of 8.76 feet on May 23, 2003. The maximum flow reached at the Ralston gage, about a day downstream of Kaw Lake, during this reporting period was 28,600 cfs with a stage of 10.55 feet on June 8, 2003
- c. **Keystone Lake Flows.** Several rainfall events above Kaw Lake in early to mid- May resulted in Kaw Lake rising to elevation 1018.61 NGVD on May 21, 2003. Average Daily releases from Kaw Lake peaked at 9,739 cfs on May 26, 2003. Between May 27 and June 24 average daily releases were kept between 2,300 cfs and 7,850 cfs. On Friday June 27, 2003 the decision was made to provide the maximum flows during daylight hours to the islands near Ponca City and the islands near the Ralston gage. This was possible since the travel time between the two areas was about 24 hours. The average daily releases were about 2,500 cfs. Release requirements were eliminated on July 25, 2003.
- d. **Canadian River System.** The spring of 2003 was below normal for the Eufala Lake Basin. The pool never filled to the top of the seasonal pool elevation. The pool was below elevation 585.0 by the end of June. The U.S. Fish and Wildlife Service determined that the minimum flow releases would not be required from Eufala Lake due to lack of water and only a few nesting Terns on the Canadian River below the lake.

### **Arkansas Navigation Study.**

The study is an on going joint feasibility study between Little Rock and Tulsa Districts to look at how

the navigation system is operated. The study is examining possible operational changes that might improve the system's ability to effectively evacuate high water out of the upstream reservoirs. The goal of this study is to increase the number of days per year that the river is open to navigation, while reducing flood problems for farmers and property owners.

- a. **Phase I.** The Division has given the District approval to proceed with implementing the recommendation of Phase I of the study - changing the operations "bench" to 60k cfs. In a letter dated September 15, 2003, the Division stated that, after reviewing the "read-ahead" material for the alternative formulation briefing, such a briefing was not necessary and the Division has the authority to implement the recommendation. The Draft Environmental Impact Statement for Phase I can be released for public comment and to meet the public involvement requirements for changing the navigation system operation manual. There is no U.S. Fish and Wildlife input in that the EIS is not completed; however, the agency and the Districts have agreed to release the document for review and comment. H&H and PER team members will discuss further when to conduct a public workshop focusing on the recommended plan and other steps needed for implementation of the recommendation.
  
- b. **Phase II.** The team discussed the meeting with navigation stakeholders on September 17, 2003, in Fort Smith. The purpose of the meeting was to discuss study progress. A MFR of that meeting has been circulated to study team members. The team was advised that a feasibility scoping meeting is to be held in the mid-fall timeframe with Headquarters, Division, the two Districts, and stakeholders. The Little Rock project manager for the study informed the navigation stakeholders that the Districts will have a draft feasibility level document forwarded to Division and Headquarters in August 2004.

#### **4. HYDROPOWER PRODUCTION.**

Hydropower generation at Tulsa District projects for FY 1999 through FY 2003 is shown in table 23.

**Table 23  
Tulsa District  
Hydropower Production By Project  
For Fiscal Years 1999 Through 2003  
(GWH)**

<b>Project</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Denison	181.0	118.0	377.8	193.1	155.3
Broken Bow	204.7	92.6	171.9	201.0	64.0

**Table 23**  
**Tulsa District**  
**Hydropower Production By Project**  
**For Fiscal Years 1999 Through 2003**  
**(GWH)**

<b>Project</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
SUB-TOTAL	385.7	210.6	549.7	394.1	219.3
Keystone	495.3	324.0	252.4	167.2	252.4
Fort Gibson	334.7	171.9	149.9	172.3	116.1
Webbers Falls	282.8	228.3	207.5	186.9	214.2
Tenkiller Ferry	159.6	96.0	107.5	121.9	57.8
Eufaula	416.8	216.9	342.8	202.2	99.3
Robert S. Kerr	857.1	570.1	533.6	488.4	454.2
SUB-TOTAL	2546.3	1,607.2	1593.7	1,338.9	1,194.0
<b>TOTAL</b>	<b>2,932.0</b>	<b>1,817.8</b>	<b>2,143.4</b>	<b>1,733.0</b>	<b>1,413.3</b>

**5. NAVIGATION ACTIVITIES.**

Up-to-date navigation statistics are available at web site [www.iwr.usace.army.mil/ndc](http://www.iwr.usace.army.mil/ndc)

**6. WATER SUPPLY STORAGE.**

Water supply allocations, contracts, and usages for FY 02 and FY 03 are shown, by project, in table 24.

a. **Arcadia Lake.** Tulsa District is working with the Department of Justice to reopen the Consent Decree entered into by the Federal government and the City of Edmond when the Arcadia Lake lawsuit was resolved in the mid-1990's. The City of Edmond has refused to repay the interest that has accrued from the end of the 10-year interest-free period on future-use water supply storage as required by the Consent Decree and the Water Supply Act of 1958. The Consent Decree allows either party the right to reopen the case for disputes that arise. Work is on-going.

b. **John Redmond Reservoir.** In 1975, the state of Kansas and the United States entered into a water supply contract. After the agreement was signed, it was determined that the sediment distribution in the lake was adversely impacting the conservation pool while the flood control pool was experiencing less than expected sedimentation losses. Funds were received in FY 00 and a reallocation study was initiated. Results of the new sediment projections developed in FY 01, the conservation pool will have to be raised 2 feet in order to make an equitable redistribution of sediment storage as required in the water supply contract. The draft Environmental Assessment (EA) was sent out for public review in April 2004. Cultural resource work has been delayed and will not be completed until FY 04. Writing of the reallocation report was started in FY 03 and is scheduled for completion in FY 04.

c. **Broken Bow Lake.** The Water Resources Development Act of 1996 allowed for the reallocation of a sufficient quantity of existing and available water supply storage space in Broken Bow Lake to support a trout fishery. The Water Resources Development Act of 1999 allowed for a 3-foot seasonal pool to offset losses to hydropower caused by the trout fishery. Tulsa District received funds in FY 01 to initiate a reallocation study to determine the environmental, cultural and socio-economic impacts of these actions. Studies accomplished during FY 01 indicate that 107,000 acre-feet (123 mgd) will need to be reallocated to support the trout fishery. EA mitigation measures call for the removal of two low-water crossings on U.S. Forest Service (USFS) land. The USFS plans on removing the low-water crossings in August 2003 after completion of its NEPA process. Cultural resource studies are scheduled to be completed FY 03. Writing of the reallocation report was started in FY 03 and will be completed when the EA is complete. Work is on-going.

d. **Sardis Lake.** The water supply agreement between the United States and the Oklahoma Water Resources Board (OWRB) is in default and the Department of Justice filed a lawsuit in July 1998. The United States lawsuit was placed in administrative park until a "qui tam" lawsuit filed by a group of Oklahoma taxpayers (qui tam) is resolved. The U.S. was dismissed from the case and the case was appealed to the U.S. Court of Appeals for the 10<sup>th</sup> Circuit. The 10<sup>th</sup> Circuit upheld the dismissal of the U.S. from the lawsuit. The Oklahoma qui tam group submitted a writ of certiorari after all its appeals to the lower courts had been exhausted. The Oklahoma Supreme Court accepted to hear the case and the state of Oklahoma and the qui tam group filed briefs in October 2002. The qui tam lawsuit was settled when the Oklahoma Supreme Court ruled that the water storage contract between the State of Oklahoma and the United States Government is a legally binding contract. Since that decision, the Federal government has re-opened its lawsuit and it is now in litigation in the U.S. District Court for the Northern District of Oklahoma. The United States filed a motion for summary judgment on 14 December 2003. The State of Oklahoma is to file its response by 23 January 2004. Late interest is continuing to accrue on this project and the payout amount is now estimated to be in excess of \$62M. Work is on-going.

e. **Waurika Lake.** The Tulsa District did extensive cost accounting research on the water conveyance facilities at Waurika Lake. The Waurika Project Master Conservancy District (WPMCD) is responsible for 100 percent reimbursement of the construction costs. Costs were finalized for the conveyance facilities when settlement was reached on an outstanding construction claim. The WPMCD questioned all costs included in the final cost accounting. When researching

the costs, Tulsa District found that lands purchased specifically for the conveyance facilities had been inadvertently charged to the reservoir. All associated land costs, including supervision and administration were backed out of the reservoir accounts and applied to the appropriate conveyance facility. The WPMCD found legislative relief for the construction claim, final construction costs and the land costs. WRDA 99 waived the \$2.9M construction claim and \$595K, which represented one-half of the difference between the 1978 construction cost estimate and the actual construction costs determined after completion of the project. The WPMCD sought additional legislative relief in WRDA 2000 and WRDA 2002 but no language has passed to accommodate WPMCD's request for additional relief. The WPMCD continues to pay invoices based on estimated costs rather than adjusted costs. Language was included in the draft WRDA 2003 that would have kept repayment amortization schedules that were in the contracts in 1986. Tulsa District continues to work with WPMCD and the Congressional office to resolve these issues.

f. **Lake Texoma.** Funds were received in FY 02 from the Ft. Worth District to begin a reallocation study on Lake Texoma. WRDA of 1986 allows the reallocation of an additional 300,000 acre-feet from hydropower to water supply. Due to the rapid growth and drought conditions that Texas has been experiencing, there has been a lot of interest by the North Texas area to have this reallocation accomplished. In FY 02, a sediment survey was completed; future sediment estimates were extrapolated; a new area-elevation-capacity table developed; and the H&H SUPER model was updated to include the latest period of record data. Funds were received in FY 03 to continue the reallocation study. Two public scoping meetings were held. A contractor has been hired to do the EA. Hydropower benefits are being developed by HAC in Portland. H&H entered new sediment data into the SUPER model and has begun making runs to determine effects on flow-duration and flood frequency. The City of Dallas requested 90,000 acre-feet of storage and the North Texas Municipal Water District has requested 100,000 acre-feet of storage for the Texas portion of the reallocation. There is not enough storage to satisfy all the growing Texas needs. The state of Texas is still working with Southwestern Division on ways to obtain more storage for this growing area.

g. **Wister Lake.** A reallocation study was initiated on Wister Lake to study the effects on flood control loss, the environment and cultural resources from the two legislative pool raises that have occurred at Wister Lake. The EA has identified extensive mitigation measures for loss of wildlife habitat. The cultural resource study has been delayed due to the Native American concerns that burial sites were lost because of the legislative pool raises that did not allow mitigation or removal prior to the pool raise. Due to extensive cultural mitigation, the EA will be finalized FY 04 and the draft reallocation report is scheduled to be completed in FY 04.

h. **Hulah Lake.** Hulah Lake suffered a severe drought in FY 02 losing all but 17 percent of its conservation pool. Hulah Lake is the City of Bartlesville, Oklahoma's (Bartlesville) main water supply source. During the critical stage of the drought all downstream flows and withdrawals from the lake had to be discontinued. Bartlesville requested withdrawals from water quality releases being made from Copan Lake as a backup solution to no withdrawals from Hulah. This has prompted a congressional interest in performing a reallocation study at Hulah Lake to determine if there are other ways to provide additional water supply storage. This includes reallocating from the flood control pool, operating Hulah and Copan as a system, changing the operation of the lakes,

etc. The reallocation study commenced in FY 04 when funds were received. A new sediment survey was conducted on Hulah Lake. Public scoping meetings have been held, alternatives developed and SUPER runs are currently being run. Work is on-going. The EA is scheduled for completion in December 04 and the draft reallocation report is schedule for March 2005.

i. **Copan Lake.** Because of the severe drought at Hulah Lake in FY 2002, there is congressional interest in performing a reallocation study at Copan Lake to see if additional storage can be reallocated at Copan Lake for the city of Bartlesville during times of drought. Copan Lake has water quality storage which might be reallocated to water supply. The study commenced in FY 04. Work is on-going in conjunction with the Hulah Lake reallocation.

j. **Hugo Lake.** Interest has resurfaced in raising Hugo Lake an additional 5 feet. Hugo Lake was authorized and designed to be raised in 5-foot increments as a part of a 3 reservoir system (Hugo, Sardis and Tuskahoma). Since Sardis Lake is the only project above Hugo that has been built, Hugo has the potential to be raised an additional 5 feet from elevation 404.5 to 409.5.

**Table 24**  
**Tulsa District**  
**Water Supply Allocations**  
**For Fiscal Years 2002 Through 2003**  
**(In Acre Feet)**

PROJECT NAME	AMOUNT OF STORAGE ALLOCATED	AMOUNT OF STORAGE CONTRACTED	NUMBER OF CONTRACTS (USERS)	AMOUNT SUPPLIED	
				(FY 02)	(FY 03)
<u>ARK RIVER BASIN</u>					
Arcadia	23,090	23,090	1	3239	3580
Pearson-Skubitz Big Hill	25,700	25,700	1	975	999
Birch	7,630	0	0	0	0
Canton	90,000 (1)	90,000	1	0	0
Copan	7,500	5,000	1	98	78
Council Grove	32,400 (2)	32,400	2	0	0
El Dorado	142,800	142,800	1	9790	9082
Elk City	20,180 (3)	24,300	2	0	0
Eufaula	56,000	13,033	26	4123	6510
Fort Gibson	0	0	0	16150	11730
Fort Supply	400	400	0	0	0
Heyburn	2,000 (4)	2,000	3	1932	1857

**Table 24**  
**Tulsa District**  
**Water Supply Allocations**  
**For Fiscal Years 2002 Through 2003**  
**(In Acre Feet)**

PROJECT NAME	AMOUNT OF STORAGE ALLOCATED	AMOUNT OF STORAGE CONTRACTED	NUMBER OF CONTRACTS (USERS)	AMOUNT SUPPLIED	
				(FY 02)	(FY 03)
Hulah	19,800	19,800	4	7299	
John Redmond	37,450 (5)	44,900 (4)	2	41020	32115
Kaw	17,1200	90,989	5 (6)	9569	8128
Keystone	20,000	18,000	1	8129	5977
Marion	44,730 (7)	50,800 (7)	2	1052	754
Oologah	342,600	327,005	9	74287	62878
Optima	76,200	0	0	0	0
Skiatook	62,900	15,248	7 (6)	8366	8514
Tenkiller	25,400	17,964	30	5193	8149
Toronto	400	400	2	298	0
Wister	14,000	13,653	3	11807	10543
<b>RED RIVER BASIN</b>					
Broken Bow	152,500 (8)	8,355	2	3695	3283
Hugo	47,600	45,402	4	9928	7962
Pat Mayse	109,600	109,600	1	17153	11750
Pine Creek	49,400	28,800	1	33967	34000
Sardis	297,200	297,200	1	0	0
Texoma (10)	158,060 (9)	146,460	8	51907	88531
Waurika	151,400	41,800	1	5138	9585

(1) Based on 1977 sedimentation survey.

(2) Reallocation of 8,000 acre-feet of water quality storage to water supply storage 6/26/96.

(3) Based on 1992 sedimentation resurvey; estimated storage to be available in year 2016; reallocation (of 10,000 acre-feet water quality to water supply 6/26/96).

(4) Estimated storage to be available in year 2000.

(5) Based on 1993 sedimentation resurvey; estimated storage to be available in year 2014; reallocation of 10,000 acre-feet water quality storage to water supply 6/26/96.

(6) Total includes one contract for conduit only.

(7) Based on 1982 sedimentation resurvey; estimated storage to be available in year 2018; reallocation

of 12,500 acre-feet water quality storage to water supply on 6/26/96.

(8) An unspecified amount of water supply storage is to be reallocated to sustain the Oklahoma Department of Wildlife Conservation's trout fishery in accordance with WRDA of 1996; the storage

will be reduced when determined.

(9) Revision due to water supply yield study; based on 1985 sedimentation survey

(10) Joint water supply and power provided between elevations 617.0 - 590.0.

## 7. LAKE ATTENDANCE.

Lake attendance figures (1000's visitor hours) for fiscal years 1999 through 2003 are tabulated in table 25.

**Table 25**  
**Tulsa District**  
**Annual Lake Attendance**  
**For Fiscal Years 1999 Through 2003**  
**(1000's Visitor Hours)**

<b>LAKE PROJECT</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
ARCADIA LAKE	2,201	6,790	7,463	6,568	5,266
BIRCH LAKE	1,193	1,024	1,719	1,590	1,598
BROKEN BOW LAKE	18,354	21,116	26,784	24,798	24,302
CANTON LAKE	12,533	11,759	11,479	12,922	13,137
CHOUTEAU LOCK & DAM 17	1,370	1,109	1,134	1,219	1,610
COPAN LAKE	233	268	183	207	215
COUNCIL GROVE	1,816	1,732	1,999	1,902	1,938
EL DORADO LAKE	6,813	7,433	6,861	6,511	6,373
ELK CITY LAKE	1,453	1,267	1,619	1,357	1,429
EUFAULA LAKE	30,832	27,270	26,239	26,979	24,553
FALL RIVER LAKE	1,414	1,582	1,504	1,376	1,054
FORT GIBSON LAKE	31,203	33,163	34,059	29,733	27,524
FORT SUPPLY LAKE	4,842	4,973	5,680	4,127	6,774
GREAT SALT PLAINS	1,552	1,379	1,624	1,358	1,330
HEYBURN LAKE	1,094	851	830	1,219	1,355
HUGO LAKE	2,259	2,306	3,165	3,374	3,347
HULAH LAKE	463	399	430	293	280
JOHN REDMOND RESERVOIR	2,044	967	2,608	924	1,692
KAW LAKE	1,703	4,850	4,246	5,997	5,964
KEYSTONE LAKE	9,158	8,192	8,250	5,604	8,760
MARION RESERVOIR	7,815	5,935	7,037	9,281	8,629
NEWT GRAHAM LOCK & DAM 18	1,010	1,037	983	1,242	1,484
OOLOGAH LAKE	13,244	12,294	12,443	11,232	11,386
OPTIMA LAKE	101	62	29	37	61
PAT MAYSE LAKE	1,322	1,258	1,246	1,438	1,430
PEARSON-SKUBITZ BIG HILL LAKE	1,184	1,146	1,241	1,068	1,024
PINE CREEK LAKE	4,886	5,409	9,675	8,213	8,205
ROBERT S. KERR, LOCK & DAM 15	3,549	3,960	3,580	3,878	4,266
SARDIS LAKE	2,357	2,340	2,124	2,750	2,456
SKIATOOK LAKE	4,749	5,079	5,928	7,252	7,372
TENKILLER FERRY LAKE	19,354	26,499	31,719	32,784	40,096
TEXOMA LAKE	90,096	87,294	106,795	90,457	76,358
TORONTO LAKE	2,270	1,852	2,778	2,985	2,668

**Table 25**  
**Tulsa District**  
**Annual Lake Attendance**  
**For Fiscal Years 1999 Through 2003**  
**(1000's Visitor Hours)**

LAKE PROJECT	1999	2000	2001	2002	2003
WAURIKA LAKE	2,158	2,149	2,593	2,206	2,424
WD MAYO LOCK & DAM 14	256	6,259	233	264	1,853
WEBBERS FALLS LOCK & DAM 16	7,458	6,929	5,861	7,498	10,519
WISTER LAKE	3,866	3,392	3,659	3,595	3,460
<b>Total</b>	<b>298,204</b>	<b>305,326</b>	<b>345,801</b>	<b>324,253</b>	<b>320,949</b>

**8. COOPERATIVE PROGRAMS.**

- a. **National Weather Service.** Real-time water control, investigation and design of our water resources projects require the measurement and reporting of rainfall and evaporation data. These data are provided through a cooperative program with the National Weather Service. During FY 03, the rainfall program in the Tulsa District cost \$105,777 through transfer of funds to the National Weather Service.
  
- b. **U.S. Geological Survey.** Much of the information required for water control, hydrologic investigation, and design of water resources projects results from the reporting and measurement of flow, water quality, and sediment provided by a cooperative program with the USGS. During FY 03, this cooperative program included 82 stations. There were 105 surface water gages and 3 water quality stations operated independently by the Corps of Engineers. In FY 03, Tulsa District transferred \$411,966 to the USGS for operation of stations and data publications. The total CE/USGS program cost for FY 2003 will be \$455,986.

**9. SEDIMENT ACTIVITIES.** During FY2002, a complete resurvey of Lake Texoma was done under contract by the Texas Water Development Board (TWDB), and a new Elevation-Area-Capacity data table was posted with a complete report in 2003. Hugo Lake was the only lake surveyed in FY03 and Elevation-Area-Capacity data is under review. No suspended sediment samples were collected by Tulsa District this FY and no sampling is anticipated during FY 2003.

**10. WATER CONTROL STAFFING.**

**Table 26**  
**Tulsa District**  
**Water Control Staff**

Name	Org. Code	Position	Phone #.	Grade
Ron Bell	CESWT-EC-HM	Chief, Water Management	918-669-7093	GS-13
John Clark	CESWT-EC-HM	Reservoir Operations	918-669-7097	GS-12

**Table 26**  
**Tulsa District**  
**Water Control Staff**

<b>Name</b>	<b>Org. Code</b>	<b>Position</b>	<b>Phone #.</b>	<b>Grade</b>
Don Butler	CESWT-EC-HM	Reservoir Operations	918-669-7102	GS-12
Greg Estep	CESWT-EC-HM	Reservoir Operations	918-669-7132	GS-12
Jim Croston	CESWT-EC-HM	Reservoir Operations	918-669-7103	GS-12
Bill Chatron	CESWT-EC-HM	Reservoir Operations	918-669-7094	GS-12
Dallas Tomlinson	CESWT-EC-HM	Reservoir Operations	918-669-7093	GS-12
Kelita Stephens	CESWT-EC-HM	Reservoir Operations	918-669-7002	GS-12
Dave Urbon	CESWT-EC-HF	Chief, Forecasting/CP	918-669-7537	GS-13
John Daylor	CESWT-EC-HF	Forecasting	918-669-7099	GS-12
Mary Ann Duke	CESWT-EC-HF	Forecasting	918-669-7100	GS-12
Dan Hernandez	CESWT-EC-HF	Computer Processing	918-669-7506	GS-12
Andrew Miller	CESWT-EC-HF	Computer Processing	918-669-7276	GS-12
Lisa Samilton	CESWT-EC-HF	Computer Processing	918-669-7537	GS-12
Calvin Hall	CESWT-EC-HF	Computer Technician	918-669-7141	GS-9
* Ted Holsomback	CESWT-EC-HA	Chief, H&H Sec.	918-669-7493	GS-13
Ray Barnes	CESWT-EC-HA	Instrumentation	918-669-7108	GS-12
Paul Bisdorf	CESWT-EC-HA	Instrument Technician	918-669-7504	GS-9
Deb Oswalt	CESWT-EC-HA	Instrument Technician	918-669-7502	GS-11
Dion Burleson	CESWT-EC-HA	Instrument Technician	918-669-7503	GS-11
Randy Moe	CESWT-EC-HA	Instrument Technician	918-669-4945	GS-9
Billy Pitts	CESWT-EC-HA	Instrument Technician	918-669-7298	GS-7
* Jim Leach	CESWT-EC-HA	Backup Forecaster	918-669-7091	GS-12
* Russ Wyckoff	CESWT-EC-HA	Backup Forecaster	918-669-7107	GS-12
* Karol Rutz	CESWT-EC-HA	Backup Forecaster	918-669-7353	GS-12
* Scott Henderson	CESWT-EC-HA	Backup Forecaster	918-669-7509	GS-12
* Sara Harris	CESWT-EC-HA	Backup Forecaster	918-669-4354	GS-11
<ul style="list-style-type: none"> <li>• *Personnel whose main assignments are H&amp;H studies not water control</li> </ul>				

**SECTION X**  
**RESERVOIR DATA SUMMARY**

## SECTION X - RESERVOIR DATA SUMMARY

**Table 27**  
**Lake Summary Index**  
**By Watershed**

LAKE NAME	STREAM	DIST	STATE	YR COMP	POOL CON	ELEV FC	CAPACITY** (1,000 AF)		PAGE NO
							CON	FC	
<b>White River Basin</b>									
Beaver Lake	White	LRD	AR	66	1120	1130	1652	300	X-33
Table Rock Lake	White	LRD	AR/MO	58	915	931	2702	760	X-33
Bull Shoals Lake	White	LRD	AR/MO	52	654	695	3048	2360	X-34
Norfork Lake	North Fork	LRD	AR/MO	45	552	580	1251	732	X-34
Clearwater Lake	Black	LRD	MO	48	494	567	22	391	X-35
Greers Ferry Lake	Little Red	LRD	AR	62	461	487	1119	934	X-35
<b>Arkansas River Basin</b>									
Cheney Reservoir	N. Fork Ninnescah	TD*	KS	64	1421.6	1429	167	81	X- 10
El Dorado Lake	Walnut River	TD	KS	80	1339	1347.5	157	79	X- 13
Kaw Lake	Arkansas River	TD	OK/KS	76	1010	1044.5	429	919	X- 17
Great Salt Plains	Salt Fork Arkansas	TD	OK	41	1125	1138.5	31	240	X- 15
Keystone Lake	Arkansas River	TD	OK	64	723	754	618	1219	X- 18
Heyburn Lake	Polecat Creek	TD	OK	50	761.5	784	7	48	X- 16
Toronto Lake	Verdigris River	TD	KS	60	901.5	931	22	178	X- 22
Fall River Lake	Fall River	TD	KS	49	948.5	987.5	24	235	X- 14
Elk City Lake	Elk River	TD	KS	66	792	825	34	256	X- 12
Big Hill Lake	Big Hill Creek	TD	KS	81	858	867.5	27	13	X-9
Oologah Lake	Verdigris River	TD	OK	63	638	661	553	966	X-20
Hulah Lake	Caney River	TD	OK/KS	51	733	765	36	258	X-16
Copan Lake	L Caney	TD	OK/KS	80	710	732	43	184	X-12
Birch Lake	Birch Creek	TD	OK	79	750.5	774	19	39	X-10
Skiatook Lake	Hominy Creek	TD	OK	82	714	729	305	182	X-21
Newt Graham (L&D 18)	Verdigris River	TD	OK	70	532	0	24	0	X-23
Chouteau (L&D 17)	Verdigris River	TD	OK	70	511	0	23	0	X-25
Council Grove Lake	Neosho River	TD	KS	65	1270	1289	38	76	X-11
Marion Lake	Cottonwood River	TD	KS	68	1350.5	1358.5	86	60	X-19
John Redmond Dam	Neosho River	TD	KS	64	1039	1068	82	563	X-17
Pensacola Lake (Grand Lake)	Neosho (Grand)	TD*	OK	40	745	755	1672	525	X-21
Lake Hudson	Neosho (Grand)	TD*	OK	64	619	636	200	244	X-18
Fort Gibson Lake	Neosho (Grand)	TD	OK	52	544	582	365	919	X-15
Webbers Falls (L&D 16)	Arkansas River	TD	OK	70	490	0	165	0	X-25

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 27**  
**Lake Summary Index**  
**By Watershed**

LAKE NAME	STREAM	DIST	STATE	YR COMP	POOL CON	ELEV FC	CAPACITY** (1,000 AF)		PAGE NO
							CON	FC	
Tenkiller Ferry Lake	Illinois River	TD	OK	52	632	667	654	577	X-22
Lake Meredith (Sanford )	Canadian River	TD*	TX	65	2941.3	2965	945	463	X-19
Lake Thunderbird (Norman)	Little River	TD*	OK	65	1039	1049.4	120	77	X-20
Optima	N Canadian River	TD	OK	78	2763.5	2779	129	101	***
Fort Supply Lake	Wolf Creek	TD	OK	42	2004	2028	14	87	X-14
Canton Lake	N Canadian River	TD	OK	48	1615.2	1638	116	268	X-11
Arcadia Lake	Arkansas River	TD	OK	86	1006	1029.5	28	65	X-9
Eufaula Lake	Canadian River	TD	OK	64	585	597	2329	1470	X-13
Robert S. Kerr (L&D 15)	Arkansas River	TD	OK	70	460	0	494	0	X-24
W D Mayo (L&D 14)	Arkansas River	TD	OK	70	413	0	16	0	X-24
Wister Lake	Poteau River	TD	OK	49	471.6	502.5	27	400	X-23
James W Trimble (L&D 13)	Arkansas River	LRD	AR/OK	69	392	0	54	0	X-36
Ozark-Jetta Taylor (L&D 12)	Arkansas River	LRD	AR	69	372	0	148	0	X-36
Dardanelle (L&D 10)	Arkansas River	LRD	AR	64	338	0	486	0	X-37
Blue Mountain Lake	Petit Jean	LRD	AR	47	384	419	25	233	X-37
Arthur V Ormond (L&D 9)	Arkansas River	LRD	AR	69	287	0	65	0	X-38
Toad Suck Ferry (L&D 8)	Arkansas River	LRD	AR	69	265	0	35	0	X-38
Nimrod Lake	Fourche La Fave	LRD	AR	42	342	373	29	307	X-39
Murray (L&D 7)	Arkansas River	LRD	AR	69	249	0	87	0	X-39
David D. Terry (L&D 6)	Arkansas River	LRD	AR	68	231	0	50	0	X-40
Lock And Dam No. 5	Arkansas River	LRD	AR	68	213	0	65	0	X-40
Emmett Sanders (L&D 4)	Arkansas River	LRD	AR	68	196	0	70	0	X-41
Lock And Dam No. 3	Arkansas River	LRD	AR	68	182	0	46	0	X-41
Wilbur D Mills (L&D 2)	Arkansas River	LRD	AR	67	162	0	110	0	X-42
<b>Red River Basin</b>									
Altus Reservoir	N. Fork Red River	TD*	OK	46	1559	1562	141	21	X-26
Tom Steed Reservoir (Mountain Park)	W Otter Creek	TD*	OK	75	1411	1414	96	20	X-30
Lake Kemp	Wichita River	TD*	TX	77	1144	1156	299	225	X-32
Waurika Lake	Beaver Creek	TD	OK	78	951.4	962.5	203	140	X-32
Foss Reservoir	Washita River	TD*	OK	61	1562	1668.6	256	181	X-28
Fort Cobb	Cobb Creek	TD*	OK	59	1342	1354.8	78	64	X-29
Arbuckle Reservoir	Rock Creek	TD*	OK	67	872	885.3	72	36	X-26
Denison Dam (Lake Texoma)	Red River	TD	TX/OK	45	617.3	640	2836	2660	X-28
McGee Creek	McGee Creek	TD*	OK	87	577	595.5	113	199	X-30
Pat Mayse Lake	Sanders Creek	TD	TX	68	451	460.5	124	65	X-31
Sardis Lake	Jack Fork Creek	TD	OK	84	599	607	302	128	X-27

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 27  
Lake Summary Index  
By Watershed**

LAKE NAME	STREAM	DIST	STATE	YR COMP	POOL CON	ELEV FC	CAPACITY** (1,000 AF)		PAGE NO
							CON	FC	
Hugo Lake	Kiamichi River	TD	OK	74	404.5	437.5	157	809	X-29
Pine Creek Lake	Little River	TD	OK	69	443.5	480	78	388	X-31
Broken Bow Lake	Mountain Fork	TD	OK	69	599.5	627.5	919	450	X-27
Dequeen Lake	Rolling Fork	LRD	AR	77	437	473.5	35	101	X-43
Gillham Lake	Cossatot	LRD	AR	76	502	569	33	189	X-43
Dierks Lake	Saline River	LRD	AR	76	526	557.5	30	67	X-44
Millwood Lake	Little River	LRD	AR	66	259.2	287	207	1653	X-44
Cooper Dam (Jim Chapman Lake)	Sulphur River	FWD	TX	92	440	446.2	273	130	X-45
Wright Patman Lake	Sulphur River	FWD	TX	56	220	259.5	143	2509	X-45
Lake O' The Pines	Cypress Creek	FWD	TX	60	228.5	249.5	251	580	X-46
<b>Neches River Basin</b>									
Sam Rayburn	Angelina River	FWD	TX	65	164.4	173	2898	1009	X-46
B. A. Steinhagen	Neches River	FWD	TX	51	81	83	70	24	X-47
<b>Trinity River Basin</b>									
Benbrook Lake	Clear Fork	FWD	TX	52	694	724	88	170	X-47
Joe Pool Lake	Mt. Creek	FWD	TX	86	522	536	143	123	X-48
Lake Ray Roberts	Elm Fork	FWD	TX	87	632.5	640.5	749	260	X-48
Lewisville Lake	Elm Fork	FWD	TX	54	515	532	465	525	X-49
Grapevine Lake	Denton Creek	FWD	TX	52	535	560	189	248	X-49
Lavon Lake	East Fork	FWD	TX	77	492	503.5	457	277	X-50
Navarro Mills Lake	Richland Creek	FWD	TX	68	424.5	443	63	149	X-50
Bardwell Lake	Waxahachie Creek	FWD	TX	65	421	439	55	85	X-51
<b>San Jacinto River Basin</b>									
Barker Reservoir	Buffalo Bayou	GD	TX	45	0	107	0	207	X-59
Addicks Reservoir	Buffalo Bayou	GD	TX	48	0	114	0	205	X-59
<b>Brazos River Basin</b>									
Whitney Lake	Brazos	FWD	TX	51	533	571	627	1372	X-51
Aquilla Lake	Aquilla	FWD	TX	83	537.5	556	34	87	X-52
Waco Lake	Bosque	FWD	TX	65	455	500	153	574	X-52
Proctor Lake	Leon River	FWD	TX	63	1162	1197	59	315	X-53
Belton Lake	Leon River	FWD	TX	54	594	631	458	640	X-53
Stillhouse Hollow	Lampasas River	FWD	TX	68	622	666	236	395	X-54
Georgetown Lake	N Fork San Gabriel	FWD	TX	79	791	834	37	93	X-54
Granger Lake	San Gabriel River	FWD	TX	79	504	524	66	179	X-55
Somerville Lake	Yegua Creek	FWD	TX	67	238	258	160	347	X-55
<b>Colorado River Basin</b>									

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 27**  
**Lake Summary Index**  
**By Watershed**

LAKE NAME	STREAM	DIST	STATE	YR COMP	POOL CON	ELEV FC	CAPACITY** (1,000 AF)		PAGE NO
							CON	FC	
Twin Buttes Lake	S&M Concho River	FWD*	TX	63	1940.2	1969.1	186	454	X-56
O. C. Fisher Lake	N Concho River	FWD	TX	52	1908	1938.5	119	277	X-56
Hords Creek Lake	Hords Creek	FWD	TX		1900	1920	9	17	X-57
Marshall Ford Lake	Colorado River	FWD*	TX	40	81	714	1172	780	X-57
<b>Guadalupe River Basin</b>									
Canyon Lake	Guadalupe River	FWD	TX	64	909	943	386	355	X-58

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 28**  
**Lake Summary Index**  
**Alphabetically**

Project Name	River Basin	Page Number
Addicks Reservoir	San Jacinto River	X-59
Altus Reservoir	Red River	X-26
Aquilla Lake	Brazos River	X-52
Arbuckle Reservoir	Red River	X-26
Arcadia Lake	Arkansas River	X-9
Arthur V. Ormond (L&D 9)	Arkansas River	X-38
B. A. Steinhagen	Neches River	X-47
Bardwell Lake	Trinity River	X-51
Barker Reservoir	San Jacinto River	X-59
Beaver Lake	White River	X-33
Belton Lake	Brazos River	X-53
Benbrook Lake	Trinity River	X-47
Big Hill Lake	Arkansas River	X-9
Birch Lake	Arkansas River	X-10
Blue Mountain Lake	Arkansas River	X-37
Broken Bow Lake	Red River	X-27
Bull Shoals Lake	White River	X-34
Canton Lake	Arkansas River	X-11
Canyon Lake	Guadalupe River	X-58
Cheney Reservoir	Arkansas River	X-10
Chouteau (L&D 17)	Arkansas River	X-25
Clearwater Lake	White River	X-35
Cooper Dam (Jim Chapman Lake)	Red River	X-45
Copan Lake	Arkansas River	X-12
Council Grove Lake	Arkansas River	X-11
Dardanelle (L&D 10)	Arkansas River	X-37
David D. Terry (L&D 6)	Arkansas River	X-40
Denison Dam (Lake Texoma)	Red River	X-28
DeQueen Lake	Red River	X-43
Dierks Lake	Red River	X-44
El Dorado Lake	Arkansas River	X-13
Elk City Lake	Arkansas River	X-12

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 28**  
**Lake Summary Index**  
**Alphabetically**

<b>Project Name</b>	<b>River Basin</b>	<b>Page Number</b>
Emmett Sanders (L&D 4)	Arkansas River	X-41
Eufaula Lake	Arkansas River	X-13
Fall River Lake	Arkansas River	X-14
Fort Cobb	Red River	X-29
Fort Gibson Lake	Arkansas River	X-15
Fort Supply Lake	Arkansas River	X-14
Foss Reservoir	Red River	X-28
Georgetown Lake	Brazos River	X-54
Gillham Lake	Red River	X-43
Granger Lake	Brazos River	X-55
Grapevine Lake	Trinity River	X-49
Great Salt Plains	Arkansas River	X-15
Greers Ferry Lake	White River	X-35
Heyburn Lake	Arkansas River	X-16
Hords Creek Lake	Colorado River	X-57
Hugo Lake	Red River	X-29
Hulah Lake	Arkansas River	X-16
James W. Trimble (L&D 13)	Arkansas River	X-36
Joe Pool Lake	Trinity River	X-48
John Redmond Dam	Arkansas River	X-17
Kaw Lake	Arkansas River	X-17
Keystone Lake	Arkansas River	X-18
Lake Hudson	Arkansas River	X-18
Lake Kemp	Red River	X-32
Lake Meredith (Sanford)	Arkansas River	X-19
Lake O' The Pines	Red River	X-46
Lake Ray Roberts	Trinity River	X-48
Lake Sam Rayburn	Neches River	X-46
Lake Thunderbird (Norman)	Arkansas River	X-20

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 28**  
**Lake Summary Index**  
**Alphabetically**

Project Name	River Basin	Page Number
Lavon Lake	Trinity River	X-50
Lewisville Lake	Trinity River	X-49
Lock & Dam No. 3	Arkansas River	X-41
Lock & Dam No. 5	Arkansas River	X-40
Marion Lake	Arkansas River	X-19
Marshall Ford Lake	Colorado River	X-57
McGee Creek	Red River	X-30
Millwood Lake	Red River	X-44
Murray (L&D 7)	Arkansas River	X-39
Navarro Mills Lake	Trinity River	X-50
Newt Graham (L&D 18)	Arkansas River	X-23
Nimrod Lake	Arkansas River	X-39
Norfolk Lake	White River	X-34
O. C. Fisher Lake	Colorado River	X-56
Oologah Lake	Arkansas River	X-20
Optima Lake	Arkansas River	***
Ozark-Jetta Taylor (L&D 12)	Arkansas River	X-36
Pat Mayse Lake	Red River	X-31
Pensacola Lake(Grand Lake)	Arkansas River	X-21
Pine Creek Lake	Red River	X-31
Proctor Lake	Brazos River	X-53
Robert S. Kerr (L&D 15)	Arkansas River	X-24
Sardis Lake	Red River	X-27
Skiatook Lake	Arkansas River	X-21
Somerville Lake	Brazos River	X-55
Stillhouse Hollow	Brazos River	X-54
Table Rock Lake	White River	X-33
Tenkiller Ferry Lake	Arkansas River	X-22
Toad Suck Ferry (L&D 8)	Arkansas River	X-38

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

**Table 28**  
**Lake Summary Index**  
**Alphabetically**

<b>Project Name</b>	<b>River Basin</b>	<b>Page Number</b>
Tom Steed Reservoir (Mountain Park)	Red River	X-30
Toronto Lake	Arkansas River	X-22
Twin Buttes Lake	Colorado River	X-56
W D Mayo (L&D 14)	Arkansas River	X-24
Waco Lake	Brazos River	X-52
Waurika Lake	Red River	X-32
Webbers Falls (L&D 16)	Arkansas River	X-25
Whitney Lake	Brazos River	X-51
Wilbur D. Mills (L&D 2)	Arkansas River	X-42
Wister Lake	Arkansas River	X-23
Wright Patman Lake	Red River	X-45

\* Section 7 Flood Control Projects

\*\* Includes dead storage, conservation, water supply, power, irrigation, etc.

\*\*\* Records not maintained due to low flow conditions

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>ARCADIA LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1939 THRU 2003	2.93	2.18	1.71	1.70	1.96	3.25	4.05	7.84	5.76	2.46	1.69	2.87	38.4
FY 2003	3.08	0.76	2.40	0.49	1.05	2.63	2.91	2.18	2.43	0.88	1.25	1.64	21.69
<u>RELEASES(1000AC.FT.)</u>													
AVG 1989 THRU 2003	1.42	2.95	2.02	2.23	1.41	2.92	3.14	6.89	6.54	3.98	2.16	3.63	39.3
FY 2003	2.30	0.54	1.17	0.95	0.28	2.20	2.29	0.60	0.77	0.00	0.00	0.00	11.12
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.75	1.98	1.42	1.25	1.56	2.32	3.24	5.56	4.45	2.72	2.69	3.63	33.57
FY 2003	4.44	0.52	1.96	0.07	1.03	2.10	1.64	2.24	3.19	1.22	2.47	2.20	23.08
DEVIATION	1.69	-1.46	0.54	-1.18	-0.53	-0.22	-1.60	-3.32	-1.26	-1.50	-0.22	-1.43	-10.49
<u>POOL ELEVATION</u>													
END OF MONTH	1006.31	1006.15	1006.63	1006.19	1006.44	1006.30	1006.02	1006.10	1006.17	1005.35	1004.97	1005.12	
MAXIMUM	1006.70	1006.31	1006.83	1006.63	1006.44	1006.56	1006.85	1006.45	1006.57	1006.17	1005.35	1005.38	
MINIMUM	1006.00	1006.07	1006.05	1006.06	1006.00	1006.08	1006.00	1005.91	1006.00	1005.08	1004.50	1004.74	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	28.15	27.85	28.74	27.92	28.39	28.13	27.61	27.76	27.89	26.41	25.74	26.00	

<u>BIG HILL LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1929 THRU 2003	1.66	1.38	0.82	0.95	1.00	2.04	2.45	3.20	3.26	1.48	0.42	1.29	20.0
FY 2003	0.12	0.16	0.30	0.10	0.31	2.31	0.94	4.35	1.69	0.23	0.67	0.35	11.54
<u>RELEASES(1000AC.FT.)</u>													
AVG 1984 THRU 2003	1.82	1.54	0.93	0.92	1.38	2.84	2.21	3.04	2.54	0.97	0.70	0.72	19.6
FY 2003	0.00	0.00	0.00	0.00	0.00	0.05	0.25	3.94	1.32	0.01	0.00	0.00	5.57
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.35	2.53	1.50	1.37	1.41	2.76	3.78	5.30	5.42	3.67	3.50	4.64	39.23
FY 2003	1.57	0.44	0.83	0.15	1.22	3.27	3.97	5.49	4.08	1.63	6.39	2.73	31.77
DEVIATION	-1.78	-2.09	-0.67	-1.22	-0.19	0.51	0.19	0.19	-1.34	-2.04	2.89	-1.91	-7.46
<u>POOL ELEVATION</u>													
END OF MONTH	856.56	856.31	856.31	856.20	856.37	858.04	858.19	858.15	858.00	857.46	857.48	857.28	
MAXIMUM	856.94	856.62	856.46	856.43	856.37	858.10	858.24	859.95	859.05	858.05	857.48	857.67	
MINIMUM	856.52	856.22	856.18	856.13	856.11	856.24	857.84	858.11	857.93	857.34	856.77	857.26	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	25.28	24.99	24.99	24.87	25.06	27.02	27.20	27.15	26.97	26.33	26.36	26.12	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>BIRCH LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1938 THRU 2003	2.05	1.65	1.35	1.12	1.53	3.55	4.03	5.87	3.81	1.49	0.80	1.65	28.9
FY 2003	0.00	0.00	0.33	0.05	0.43	6.71	0.00	1.19	0.80	0.14	1.50	1.42	12.58
<u>RELEASES(1000AC.FT.)</u>													
AVG 1979 THRU 2003	2.28	1.52	1.49	1.35	1.96	5.00	3.43	6.26	4.64	1.96	0.77	0.63	31.3
FY 2003	0.47	0.19	0.10	0.05	0.04	1.87	0.25	0.33	1.09	0.46	0.45	0.45	5.75
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.81	2.27	1.47	1.25	1.46	2.60	3.34	5.00	4.59	2.98	3.21	4.30	35.28
FY 2003	2.48	0.33	1.52	0.04	1.56	4.17	1.63	4.66	4.56	1.01	7.15	4.30	33.41
DEVIATION	-0.33	-1.94	0.05	-1.21	0.10	1.57	-1.71	-0.34	-0.03	-1.97	3.94	0.00	-1.87
<u>POOL ELEVATION</u>													
END OF MONTH	746.74	746.18	746.35	746.09	746.37	750.45	749.44	749.82	749.15	747.79	748.12	748.41	
MAXIMUM	747.82	746.74	746.35	746.35	746.37	752.19	750.45	750.26	749.82	749.15	748.12	748.81	
MINIMUM	746.74	746.18	746.11	746.08	746.05	746.37	749.44	748.84	748.31	747.79	746.80	748.12	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	15.18	14.62	14.79	14.53	14.81	19.17	18.03	18.45	17.71	16.26	16.60	16.91	

<u>CHENEY RESERVOIR</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1950 THRU 2003	11.02	7.52	6.68	6.95	8.88	17.00	14.99	19.53	16.59	10.27	5.31	8.61	133.3
FY 2003	18.79	6.39	7.29	5.19	7.71	41.41	29.90	20.67	7.91	3.38	5.78	4.19	158.60
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	5.24	7.41	3.40	4.08	5.78	10.27	14.67	12.47	13.68	8.03	1.96	2.48	89.5
FY 2003	0.00	0.00	0.30	1.27	6.61	23.69	29.69	17.06	4.33	0.00	0.00	0.00	82.95
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.05	1.28	0.87	0.63	0.89	1.84	2.32	3.91	3.97	2.93	2.85	2.83	26.37
FY 2003	5.96	0.19	0.68	0.01	0.69	3.21	3.28	3.18	1.93	0.18	4.29	2.04	25.64
DEVIATION	3.91	-1.09	-0.19	-0.62	-0.20	1.37	0.96	-0.73	-2.04	-2.75	1.44	-0.79	-0.73
<u>POOL ELEVATION</u>													
END OF MONTH	1421.13	1421.38	1421.77	1421.84	1421.66	1423.01	1422.38	1421.97	1421.55	1420.51	1419.92	1419.66	
MAXIMUM	1421.14	1421.47	1421.83	1421.93	1421.97	1424.28	1423.16	1422.40	1421.97	1421.55	1420.60	1419.92	
MINIMUM	1419.59	1421.13	1421.36	1421.66	1421.60	1421.61	1421.61	1421.58	1421.50	1420.50	1419.66	1419.61	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	162.61	164.98	168.69	169.35	167.64	180.84	174.62	170.59	166.60	156.89	151.52	149.23	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>COUNCIL GROVE LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	5.86	4.88	3.27	2.74	4.49	8.18	12.10	16.03	15.55	11.57	4.78	6.67	96.1
FY 2003	3.30	0.60	0.55	0.09	1.25	2.43	13.33	5.84	2.82	0.47	8.33	1.25	40.26
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	4.68	5.55	3.99	2.31	3.38	8.08	11.32	15.61	14.90	10.10	5.22	2.14	87.3
FY 2003	1.06	0.33	0.77	0.78	0.46	0.32	0.23	2.29	2.14	2.59	1.86	1.90	14.74
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.54	1.58	1.12	0.82	0.87	2.03	3.07	4.60	4.84	3.59	3.58	3.67	32.31
FY 2003	5.45	0.37	0.13	0.07	1.02	1.30	4.05	2.78	3.96	0.26	5.96	2.60	27.95
DEVIATION	2.91	-1.21	-0.99	-0.75	0.15	-0.73	0.98	-1.82	-0.88	-3.33	2.38	-1.07	-4.36
<u>POOL ELEVATION</u>													
END OF MONTH	1269.14	1269.09	1268.91	1268.61	1268.83	1269.41	1273.46	1274.12	1274.05	1272.86	1274.46	1274.00	
MAXIMUM	1269.14	1269.24	1269.13	1268.96	1268.83	1269.53	1273.46	1274.59	1274.64	1274.90	1274.46	1274.54	
MINIMUM	1268.39	1269.08	1238.94	1268.61	1268.54	1268.83	1269.37	1273.46	1273.99	1272.86	1271.78	1273.95	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	34.09	33.95	33.47	32.68	33.26	34.83	46.92	49.07	48.83	44.99	50.21	48.66	

X-11

<u>CANTON LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	15.25	6.49	4.80	5.33	6.80	10.64	14.07	31.58	31.99	13.62	8.62	9.86	159.1
FY 2003	23.25	10.39	13.14	11.48	10.26	13.23	14.18	16.82	9.12	1.34	1.08	0.29	124.60
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	4.36	4.81	5.76	5.86	6.41	8.60	12.93	11.44	15.38	8.15	5.83	6.59	96.1
FY 2003	1.77	10.32	13.73	9.22	6.49	15.60	10.19	13.24	6.24	0.00	0.00	1.25	88.05
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	1.44	0.91	0.59	0.50	0.73	1.20	1.59	3.32	2.86	2.49	2.45	1.86	19.94
FY 2003	4.63	0.24	0.65	0.00	0.32	0.98	1.17	2.36	4.81	0.67	3.54	2.00	21.37
DEVIATION	3.19	-0.67	0.06	-0.50	-0.41	-0.22	-0.42	-0.96	1.95	-1.82	1.09	0.14	1.43
<u>POOL ELEVATION</u>													
END OF MONTH	1615.77	1615.56	1615.38	1615.54	1615.93	1615.36	1615.47	1615.48	1615.48	1614.94	1614.54	1614.01	
MAXIMUM	1615.77	1616.44	1616.02	1615.59	1615.98	1616.05	1615.86	1616.53	1615.83	1615.51	1614.94	1614.54	
MINIMUM	1613.08	1615.50	1615.30	1615.38	1615.54	1615.36	1615.35	1615.33	1615.24	1614.94	1614.45	1613.92	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	114.29	112.62	111.19	112.46	115.56	111.04	111.91	111.99	111.99	107.72	104.66	100.61	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>COPAN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1936 THRU 2003	17.93	15.85	10.68	9.23	13.48	29.39	33.03	43.24	35.54	15.85	3.71	10.08	238.0
FY 2003	0.23	0.00	1.03	0.27	1.56	31.32	19.85	134.72	34.61	1.95	6.19	12.35	244.09
<u>RELEASES(1000AC.FT.)</u>													
AVG 1984 THRU 2003	29.64	18.18	19.90	16.31	14.26	46.62	42.21	49.39	50.64	31.35	3.72	3.69	325.9
FY 2003	0.15	0.15	0.15	0.15	0.14	21.10	18.91	109.22	58.29	3.26	0.51	11.68	223.71
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.15	2.30	1.36	1.23	1.28	2.56	3.43	5.00	4.84	3.23	3.07	3.90	35.35
FY 2003	2.26	0.37	1.07	0.07	1.03	2.49	2.86	9.15	4.73	1.05	6.76	2.31	34.15
DEVIATION	-0.89	-1.93	-0.29	-1.16	-0.25	-0.07	-0.57	4.15	-0.11	-2.18	3.69	-1.59	-1.20
<u>POOL ELEVATION</u>													
END OF MONTH	709.66	709.41	709.56	709.49	709.73	711.32	711.16	715.45	710.74	709.84	710.55	710.24	
MAXIMUM	709.86	709.66	709.61	709.68	709.74	714.76	711.57	721.22	715.45	710.76	710.55	712.06	
MINIMUM	709.48	709.41	709.36	709.44	709.43	709.73	710.76	710.39	710.33	709.83	709.24	710.13	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	35.37	34.36	34.96	34.68	35.65	42.84	42.10	65.60	40.16	36.09	37.76	36.00	

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<u>ELK CITY LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	21.85	21.09	12.36	10.78	14.85	31.87	43.60	44.54	45.55	18.87	6.22	14.96	286.5
FY 2003	3.49	0.79	1.00	2.09	9.18	77.05	37.25	79.60	41.56	5.57	26.65	28.07	312.30
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	25.22	21.10	16.38	19.25	18.25	44.02	35.73	40.17	50.31	36.88	8.29	6.45	322.0
FY 2003	0.99	0.70	0.50	3.23	12.72	54.95	39.61	77.62	41.85	9.21	6.82	39.04	287.24
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.89	2.21	1.33	1.13	1.19	2.41	3.37	4.90	5.01	3.46	3.21	4.16	35.27
FY 2003	3.77	0.39	0.91	0.16	1.23	3.63	3.39	6.61	4.67	1.48	7.32	2.55	36.11
DEVIATION	0.88	-1.82	-0.42	-0.97	0.04	1.22	0.02	1.71	-0.34	-1.98	4.11	-1.61	0.84
<u>POOL ELEVATION</u>													
END OF MONTH	794.14	793.89	793.92	793.87	792.80	797.98	797.06	797.09	796.56	794.94	798.97	796.22	
MAXIMUM	794.33	794.22	793.97	794.22	793.87	803.42	798.48	804.56	800.28	796.57	798.97	802.64	
MINIMUM	793.53	793.88	793.00	793.87	792.45	792.01	796.09	796.09	795.96	794.94	793.61	796.08	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	36.32	35.39	35.50	35.31	31.41	52.29	48.06	48.20	45.90	39.32	57.07	44.44	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>EL DORADO LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	5.47	5.41	3.28	2.64	4.13	8.01	11.73	12.48	14.33	7.15	3.75	4.57	83.0
FY 2003	4.58	0.13	0.29	0.00	1.06	19.36	23.22	8.85	9.11	0.81	10.20	18.42	96.02
<u>RELEASES(1000AC.FT.)</u>													
AVG 1983 THRU 2003	5.27	6.47	4.43	3.11	4.11	6.98	9.15	11.43	12.38	5.63	2.48	1.44	72.9
FY 2003	0.45	0.30	0.31	0.31	0.28	0.31	13.13	11.19	5.30	0.81	0.81	11.49	44.69
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.50	1.62	1.08	0.83	0.92	1.96	2.81	4.30	4.68	3.46	3.30	3.52	30.98
FY 2003	7.00	0.34	0.59	0.08	1.11	3.20	4.18	3.89	5.32	1.05	6.67	4.58	38.01
DEVIATION	4.50	-1.28	-0.49	-0.75	0.19	1.24	1.37	-0.41	0.64	-2.41	3.37	1.06	7.03
<u>POOL ELEVATION</u>													
END OF MONTH	1337.42	1337.16	1337.02	1336.78	1336.76	1338.96	1339.77	1339.01	1339.00	1338.24	1338.85	1339.29	
MAXIMUM	1337.44	1337.43	1337.17	1337.04	1336.84	1339.05	1340.66	1339.77	1339.60	1339.00	1338.85	1340.17	
MINIMUM	1337.06	1337.16	1336.98	1336.77	1336.69	1303.00	1338.85	1339.00	1338.95	1338.24	1337.55	1338.71	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	144.74	142.76	141.70	139.94	139.79	156.68	163.26	157.07	156.99	151.02	155.82	159.35	

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<u>EUFULA LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	328.66	281.08	274.67	244.54	324.11	462.24	556.58	827.69	593.18	230.12	130.59	208.07	4461.5
FY 2003	77.36	78.94	207.12	84.39	154.22	348.50	140.13	159.32	151.60	23.11	41.06	115.14	1580.89
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	135.27	258.03	323.35	364.52	317.63	536.50	491.29	702.71	585.67	278.80	190.54	137.24	4321.5
FY 2003	1.88	14.64	37.99	207.98	122.57	52.25	125.16	77.20	167.38	96.53	217.48	57.62	1178.69
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.36	2.54	1.92	1.64	2.04	2.88	3.77	5.60	4.42	2.94	2.78	4.00	37.89
FY 2003	3.32	0.58	3.10	0.06	1.67	2.26	1.11	2.82	3.62	0.77	3.80	3.11	26.22
DEVIATION	-0.04	-1.96	1.18	-1.58	-0.37	-0.62	-2.66	-2.78	-0.80	-2.17	1.02	-0.89	-11.67
<u>POOL ELEVATION</u>													
END OF MONTH	582.12	582.56	584.11	582.69	582.89	585.43	585.07	585.44	584.90	583.59	581.30	581.57	
MAXIMUM	584.55	582.77	584.11	584.40	582.93	585.43	585.53	585.59	585.53	584.94	583.86	581.99	
MINIMUM	581.40	582.12	582.50	582.68	582.21	582.71	585.07	584.87	584.79	583.58	581.18	581.28	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	2026.46	2068.60	2222.19	2081.04	2100.20	2360.71	2322.08	2361.78	2304.19	2169.76	1950.68	1975.48	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>FALL RIVER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	15.96	17.82	11.47	9.47	13.54	27.60	36.58	35.54	38.38	15.68	6.72	12.97	241.7
FY 2003	5.39	2.47	1.82	0.31	7.88	77.84	50.66	26.42	14.34	0.81	5.35	11.30	204.59
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	13.76	18.59	17.45	10.97	13.93	35.59	35.22	31.69	37.64	24.50	6.51	6.24	252.1
FY 2003	1.94	0.27	0.28	13.16	1.34	67.08	49.29	29.92	13.65	2.74	0.39	13.57	193.62
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.26	1.66	1.42	1.21	1.78	2.62	3.04	4.47	4.45	3.64	2.87	3.52	32.94
FY 2003	6.74	0.41	0.86	0.19	1.46	3.82	3.81	3.65	4.00	1.32	6.19	2.76	35.21
DEVIATION	4.48	-1.25	-0.56	-1.02	-0.32	1.20	0.77	-0.82	-0.45	-2.32	3.32	-0.76	2.27
<u>POOL ELEVATION</u>													
END OF MONTH	949.12	949.84	950.40	944.16	947.53	951.53	951.71	950.05	949.89	948.43	949.98	948.72	
MAXIMUM	949.29	949.87	950.40	950.46	947.61	963.76	957.03	951.87	951.85	949.89	949.98	951.10	
MINIMUM	947.75	949.12	949.84	944.10	944.16	947.53	948.59	948.98	949.48	948.43	947.76	948.60	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	24.09	25.91	27.37	14.06	20.46	30.44	30.94	26.44	26.03	22.46	26.26	23.14	

<u>FORT SUPPLY LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	5.01	3.01	2.64	2.16	2.35	3.38	4.68	10.26	9.25	3.54	2.94	3.13	52.4
FY 2003	2.64	0.65	1.62	1.35	1.55	2.61	2.32	1.52	3.48	0.95	0.17	0.62	19.48
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1.62	1.71	1.57	2.18	2.42	3.42	3.82	6.40	3.57	0.76	0.59	0.83	28.9
FY 2003	1.01	1.01	1.00	1.69	1.51	1.99	1.45	0.51	2.80	0.00	0.00	0.00	12.97
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	1.57	0.89	0.65	0.52	0.77	1.22	1.65	3.50	3.09	2.37	2.47	1.89	20.59
FY 2003	5.58	0.32	0.56	0.02	0.41	0.97	0.86	2.06	5.84	0.59	5.43	2.16	24.80
DEVIATION	4.01	-0.57	-0.09	-0.50	-0.36	-0.25	-0.79	-1.44	2.75	-1.78	2.96	0.27	4.21
<u>POOL ELEVATION</u>													
END OF MONTH	2004.56	2004.19	2004.40	2004.10	2004.01	2004.04	2004.02	2004.11	2004.08	2003.83	2003.30	2003.29	
MAXIMUM	2004.58	2004.58	2004.49	2004.40	2004.10	2004.50	2004.58	2004.28	2004.41	2004.23	2003.83	2003.61	
MINIMUM	2003.68	2004.19	2003.98	2004.10	2003.99	2004.01	2003.83	2003.96	2003.90	2003.83	2002.93	2003.26	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	13.33	12.64	13.03	12.47	12.30	12.36	12.32	12.49	12.43	11.99	11.09	11.07	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>FORT GIBSON LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	403.15	437.24	390.46	354.65	400.50	638.58	827.33	897.16	865.95	495.03	252.38	307.16	6269.6
FY 2003	17.85	16.17	36.12	57.32	74.88	296.73	304.96	723.88	375.58	126.84	135.91	339.77	2506.01
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	392.06	491.06	520.65	426.43	402.03	811.57	874.95	819.63	783.96	570.61	251.27	226.56	6570.8
FY 2003	0.02	18.49	26.82	64.35	71.33	291.40	294.61	719.23	345.08	134.81	151.63	322.20	2439.97
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.70	3.09	2.23	1.97	2.29	3.26	4.17	5.37	4.96	2.95	3.18	4.37	41.54
FY 2003	1.88	0.29	2.67	0.09	1.75	2.26	1.54	5.38	3.80	1.66	6.42	2.50	30.24
DEVIATION	-1.82	-2.80	0.44	-1.88	-0.54	-1.00	-2.63	0.01	-1.16	-1.29	3.24	-1.87	-11.30
<u>POOL ELEVATION</u>													
END OF MONTH	554.19	553.93	554.31	553.83	554.45	554.44	554.54	554.73	555.82	554.79	553.49	554.09	
MAXIMUM	554.19	554.37	554.32	554.49	555.44	555.60	555.59	557.23	557.22	555.83	555.15	556.20	
MINIMUM	553.39	553.83	553.00	553.33	553.43	553.67	553.80	553.19	553.34	553.22	552.00	553.49	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	368.87	363.89	371.18	362.02	373.88	373.69	375.62	379.29	400.90	380.45	355.66	366.94	

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<u>GREAT SALT PLAINS</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	25.10	20.47	12.77	12.69	16.80	33.97	41.08	61.95	53.55	28.21	25.10	20.91	352.6
FY 2003	197.98	31.45	24.94	18.00	17.90	73.09	62.63	52.27	42.99	4.45	4.97	15.09	545.77
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	26.73	37.89	21.24	18.05	21.58	52.47	57.00	70.96	68.15	38.05	27.91	19.16	459.2
FY 2003	174.55	46.65	23.31	17.18	16.19	65.99	58.55	52.12	41.38	3.29	1.47	6.86	507.52
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	1.86	1.13	0.79	0.64	0.87	1.57	2.24	3.66	3.64	2.47	2.87	2.44	24.18
FY 2003	7.73	0.11	0.51	0.05	0.79	2.14	2.59	2.48	3.70	0.89	3.44	1.68	26.11
DEVIATION	5.87	-1.02	-0.28	-0.59	-0.08	0.57	0.35	-1.18	0.06	-1.58	0.57	-0.76	1.93
<u>POOL ELEVATION</u>													
END OF MONTH	1127.26	1125.43	1125.50	1125.44	1125.53	1126.06	1126.08	1125.60	1125.28	1124.61	1124.49	1125.14	
MAXIMUM	1130.59	1127.26	1125.75	1125.67	1125.77	1127.55	1127.16	1126.53	1126.69	1125.47	1124.61	1125.40	
MINIMUM	1124.78	1125.31	1125.15	1125.08	1125.26	1125.38	1125.31	1125.36	1125.26	1124.37	1123.73	1124.49	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	46.76	29.72	30.31	29.80	30.56	35.07	35.26	31.15	28.46	23.21	22.31	27.29	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

HEYBURN LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1929 THRU 2003	2.89	3.30	2.61	1.88	3.22	5.39	7.36	9.60	7.88	2.03	1.36	3.05	50.6
FY 2003	0.09	0.04	0.65	0.17	0.28	3.88	0.84	5.46	0.67	0.03	1.45	1.77	15.33
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	2.80	3.85	3.58	2.71	4.43	8.71	7.22	12.93	7.13	0.95	0.61	0.67	55.6
FY 2003	0.00	0.00	0.00	0.00	0.00	3.35	0.69	4.96	0.35	0.05	0.40	1.43	11.22
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.03	2.40	1.62	1.49	1.63	2.70	3.46	5.04	4.17	3.01	2.83	3.98	35.36
FY 2003	3.65	0.60	2.72	0.01	1.70	3.66	1.63	5.09	3.62	0.79	6.43	3.90	33.80
DEVIATION	0.62	-1.80	1.10	-1.48	0.07	0.96	-1.83	0.05	-0.55	-2.22	3.60	-0.08	-1.56
<u>POOL ELEVATION</u>													
END OF MONTH	760.78	760.56	761.23	761.27	761.48	761.82	761.61	761.76	761.71	760.76	761.51	761.59	
MAXIMUM	760.83	760.81	761.25	761.38	761.48	763.68	761.93	764.09	761.80	761.71	762.13	762.67	
MINIMUM	760.50	760.56	760.54	761.23	761.24	761.48	761.60	761.50	761.47	760.76	760.73	761.45	
<u>POOL CONTENT-EOM</u> (1000AC.FT)													
	6.50	6.33	6.88	6.91	7.10	7.39	7.21	7.34	7.30	6.48	7.12	7.19	

HULAH LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1918 THRU 2003	29.42	24.28	13.92	11.55	15.06	33.44	43.78	52.58	43.01	26.18	10.94	23.50	327.7
FY 2003	5.20	2.83	2.79	3.53	4.65	103.44	42.70	165.95	92.00	2.92	36.54	9.60	472.16
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	26.61	24.38	21.40	17.61	16.35	53.92	46.79	53.49	56.32	34.99	5.23	8.31	365.4
FY 2003	4.13	3.37	1.79	4.03	2.57	96.85	42.48	118.65	130.99	11.02	1.63	46.04	463.56
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.97	2.21	1.34	1.14	1.22	2.34	3.33	5.07	4.58	3.20	3.23	4.08	34.71
FY 2003	3.04	0.37	0.86	0.10	1.07	4.11	3.18	7.52	5.97	0.82	7.93	2.67	37.64
DEVIATION	0.07	-1.84	-0.48	-1.04	-0.15	1.77	-0.15	2.45	1.39	-2.38	4.70	-1.41	2.93
<u>POOL ELEVATION</u>													
END OF MONTH	733.46	733.16	733.40	733.19	733.66	735.08	734.78	743.49	735.53	733.41	740.49	733.28	
MAXIMUM	733.87	733.47	733.45	733.52	733.77	745.77	737.88	748.46	744.25	735.53	740.49	741.92	
MINIMUM	733.13	733.16	733.13	733.08	733.18	733.56	733.62	733.96	733.84	733.40	732.62	733.19	
<u>POOL CONTENT-EOM</u> (1000AC.FT)													
	26.83	25.70	26.60	25.81	27.58	32.98	31.78	76.83	35.06	26.64	61.38	24.29	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
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JOHN REDMOND DAM	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	76.25	65.82	44.08	36.96	49.50	98.51	139.24	159.13	165.95	118.29	45.64	65.34	1064.7
FY 2003	17.55	12.40	6.60	5.43	9.20	62.48	214.42	99.18	35.11	15.19	23.46	163.14	664.17
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	60.43	73.49	62.46	36.61	47.80	112.36	137.22	155.71	183.50	116.01	69.13	40.51	1095.2
FY 2003	5.14	4.06	2.14	2.15	6.75	56.22	143.84	159.65	44.38	13.02	3.68	161.26	602.29
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.56	1.64	1.18	0.84	0.90	2.06	2.92	4.43	4.74	3.61	3.49	3.76	32.13
FY 2003	6.49	0.28	0.22	0.24	1.09	2.01	4.52	3.61	3.77	0.51	6.21	3.17	32.12
DEVIATION	3.93	-1.36	-0.96	-0.60	0.19	-0.05	1.60	-0.82	-0.97	-3.10	2.72	-0.59	-0.01
<u>POOL ELEVATION</u>													
END OF MONTH	1037.90	1038.44	1038.70	1038.95	1039.13	1039.34	1045.68	1039.10	1037.28	1036.83	1038.85	1038.67	
MAXIMUM	1037.90	1038.63	1038.70	1038.98	1039.45	1040.67	1048.17	1045.68	1039.35	1037.52	1038.85	1044.62	
MINIMUM	1036.39	1037.90	1038.44	1038.65	1038.93	1039.03	1038.93	1038.96	1037.14	1036.65	1036.40	1037.61	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	41.81	46.06	48.12	50.10	51.57	53.30	116.73	51.32	37.10	33.74	49.31	47.88	

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KAW LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	162.26	144.31	100.48	88.29	114.53	212.86	262.36	328.24	359.13	234.48	137.35	136.24	2280.5
FY 2003	296.36	86.07	63.17	43.24	58.81	483.78	397.84	420.50	276.65	45.72	56.53	241.79	2470.47
<u>RELEASES(1000AC.FT.)</u>													
AVG 1977 THRU 2003	136.19	162.23	113.46	137.28	122.61	257.22	288.78	291.13	371.87	282.49	136.79	121.86	2421.9
FY 2003	278.75	64.26	28.40	66.17	90.23	439.64	343.40	349.10	287.94	152.17	64.06	230.65	2394.76
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.35	1.61	1.07	0.81	0.99	1.97	2.72	4.26	4.35	3.30	3.17	3.42	30.02
FY 2003	6.24	0.29	0.58	0.08	0.98	3.12	3.60	4.10	3.78	0.87	5.39	3.25	32.28
DEVIATION	3.89	-1.32	-0.49	-0.73	-0.01	1.15	0.88	-0.16	-0.57	-2.43	2.22	-0.17	2.26
<u>POOL ELEVATION</u>													
END OF MONTH	1009.11	1010.17	1012.02	1010.52	1008.50	1010.82	1013.38	1016.59	1015.59	1009.02	1008.04	1008.37	
MAXIMUM	1009.41	1010.22	1012.02	1012.62	1010.54	1021.12	1014.85	1018.61	1018.39	1015.65	1009.27	1009.70	
MINIMUM	1007.03	1008.87	1010.17	1010.52	1007.92	1008.50	1009.91	1011.62	1013.04	1009.02	1007.68	1007.38	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	391.77	409.44	441.75	415.42	381.85	420.54	467.07	530.29	510.09	390.27	374.41	379.75	

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<u>KEYSTONE LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1940 THRU 2003	449.55	381.19	322.78	227.66	285.91	534.72	640.01	885.78	780.92	578.21	333.64	322.34	5742.7
FY 2003	841.97	305.67	154.14	173.90	186.35	1007.47	703.84	790.52	632.44	173.06	90.75	430.92	5491.02
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	391.29	370.84	277.23	285.61	293.19	670.66	692.46	849.52	866.16	612.62	361.79	273.27	5944.6
FY 2003	790.16	334.29	167.93	192.07	172.34	914.76	631.56	736.42	660.88	298.71	161.42	322.02	5382.55
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.63	2.39	2.26	0.93	1.16	2.01	2.78	4.42	4.12	2.99	2.93	3.38	33.00
FY 2003	4.83	0.25	1.29	0.07	0.83	2.47	2.44	3.62	3.62	0.74	3.37	2.75	26.28
DEVIATION	1.20	-2.14	-0.97	-0.86	-0.33	0.46	-0.34	-0.80	-0.50	-2.25	0.44	-0.63	-6.72
<u>POOL ELEVATION</u>													
END OF MONTH	724.75	723.32	722.56	721.55	722.06	725.69	728.00	729.50	728.09	722.35	718.29	723.28	
MAXIMUM	724.75	724.97	723.51	723.15	724.04	731.88	728.00	731.42	730.07	728.18	723.08	723.97	
MINIMUM	717.99	723.10	722.07	720.72	721.55	722.06	723.54	724.52	727.06	722.35	718.01	718.29	
<u>POOL CONTENT-EOM</u> (1000AC.FT)													
	546.52	512.76	495.74	474.09	484.79	569.77	630.39	673.09	632.92	491.14	410.36	511.84	

<u>LAKE HUDSON</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	379.56	386.03	354.60	323.01	376.09	583.37	751.44	848.12	809.19	468.56	243.70	284.05	5807.7
FY 2003	11.46	9.62	27.44	62.68	57.92	243.57	310.42	694.18	335.91	123.37	135.22	337.29	2349.08
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	347.88	476.60	479.27	375.49	419.59	741.21	821.29	836.86	767.22	516.06	265.14	246.37	6293.0
FY 2003	9.22	9.37	12.53	44.90	58.38	245.44	301.61	701.06	323.35	118.52	123.23	347.50	2295.12
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.81	3.08	2.22	1.89	2.10	3.28	4.13	5.31	5.00	3.01	3.35	4.55	41.73
FY 2003	2.70	0.47	3.11	0.16	2.30	2.65	2.10	7.20	4.49	2.63	6.55	2.82	37.18
DEVIATION	-1.11	-2.61	0.89	-1.73	0.20	-0.63	-2.03	1.89	-0.51	-0.38	3.20	-1.73	-4.55
<u>POOL ELEVATION</u>													
END OF MONTH	618.58	618.45	618.70	620.20	620.10	619.67	620.03	619.52	620.22	620.10	620.48	619.25	
MAXIMUM	619.07	619.36	619.78	620.97	620.61	620.37	620.21	623.51	621.01	620.87	620.84	620.56	
MINIMUM	617.78	618.11	618.42	618.37	618.67	618.86	619.31	618.83	619.35	619.33	619.10	618.91	
<u>POOL CONTENT-EOM</u> (1000AC.FT)													
	195.80	194.41	197.09	213.63	212.49	207.70	211.69	206.05	213.86	212.49	216.82	203.06	

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<u>MARION LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1939 THRU 2003	4.14	3.25	2.23	2.39	3.34	6.56	7.84	10.89	9.85	7.45	2.77	4.55	65.3
FY 2003	8.71	0.60	0.59	0.00	1.36	8.65	12.67	11.36	3.85	0.46	2.22	1.96	52.42
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	2.72	3.33	3.17	1.23	2.96	4.25	5.95	8.46	7.14	7.07	2.69	1.42	50.4
FY 2003	0.44	0.18	0.10	0.09	0.08	0.09	7.79	10.26	1.33	0.73	0.77	0.53	22.38
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.41	1.49	1.03	0.74	0.94	1.96	2.77	4.47	4.64	3.61	3.42	3.48	30.96
FY 2003	6.13	0.45	0.46	0.01	0.75	2.39	4.43	4.88	2.81	1.02	4.56	2.97	30.86
DEVIATION	3.72	-1.04	-0.57	-0.73	-0.19	0.43	1.66	0.41	-1.83	-2.59	1.14	-0.51	-0.10
<u>POOL ELEVATION</u>													
END OF MONTH	1349.56	1349.43	1349.39	1349.31	1349.42	1350.54	1350.92	1350.61	1350.65	1349.83	1349.54	1349.41	
MAXIMUM	1349.58	1349.59	1349.49	1349.44	1349.49	1350.65	1351.80	1350.94	1350.80	1350.65	1349.83	1349.65	
MINIMUM	1348.34	1349.43	1349.37	-901.00	1349.30	1349.39	1350.40	0.00	1350.50	1349.83	1349.15	1349.31	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	74.85	74.08	73.83	73.36	74.02	80.84	83.20	81.27	81.52	76.47	74.73	73.96	

<u>LAKE MEREDITH</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	17.49	3.58	2.03	3.29	2.67	3.72	10.55	30.28	33.39	31.96	30.39	25.94	195.3
FY 2003	3.94	1.85	2.86	1.13	1.03	1.84	3.40	2.54	13.96	3.01	0.94	8.17	44.69
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
FY 2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	1.28	0.56	0.47	0.42	0.48	0.70	1.09	2.40	2.40	2.54	2.56	1.70	16.60
FY 2003	2.11	0.29	0.53	0.00	0.10	0.54	0.69	0.55	3.24	0.43	1.94	1.34	11.76
DEVIATION	0.83	-0.27	0.06	-0.42	-0.38	-0.16	-0.40	-1.85	0.84	-2.11	-0.62	-0.36	-4.84
<u>POOL ELEVATION</u>													
END OF MONTH	2883.38	2882.84	2882.57	2881.98	2881.54	2880.87	2879.75	2878.24	2879.11	2877.44	2875.45	2875.27	
MAXIMUM	2883.52	2883.40	2882.87	2882.58	2881.99	2881.57	2880.87	2879.75	2879.12	2879.11	2877.44	2875.96	
MINIMUM	2883.21	2882.83	2882.56	2881.98	2881.35	2281.09	2879.75	2878.24	2878.07	2877.44	2875.41	2875.15	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	202.95	199.34	197.55	193.65	190.79	186.44	179.30	169.88	175.27	164.98	153.03	151.97	

Summary of Lake Conditions for Water Year 2003  
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<u>LAKE THUNDERBIRD</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	4.92	2.80	3.29	2.58	4.08	6.72	8.95	13.33	9.97	3.57	1.51	3.16	64.9
FY 2003	4.09	1.35	3.71	0.88	2.16	7.65	5.56	2.77	7.12	0.68	4.85	2.12	42.95
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	2.01	3.57	2.59	3.41	2.92	6.72	6.52	8.51	8.12	2.80	1.21	0.53	48.9
FY 2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.07	2.10	1.56	1.35	1.69	2.46	3.41	5.35	4.44	2.71	2.68	3.57	34.39
FY 2003	5.06	1.10	2.26	0.03	1.38	2.84	1.20	1.90	4.98	1.53	4.65	2.55	29.48
DEVIATION	1.99	-1.00	0.70	-1.32	-0.31	0.38	-2.21	-3.45	0.54	-1.18	1.97	-1.02	-4.91
<u>POOL ELEVATION</u>													
END OF MONTH	1037.77	1037.55	1037.80	1037.63	1037.74	1038.47	1038.73	1038.45	1038.92	1037.96	1037.90	1037.65	
MAXIMUM	1037.79	1037.87	1037.82	1037.80	1037.76	1038.47	1038.86	1038.73	1039.26	1038.92	1037.96	1037.95	
MINIMUM	1037.10	1037.55	1037.52	1037.63	1037.61	1037.70	1038.45	1038.45	1038.44	1037.85	1037.30	1037.64	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	112.27	110.99	112.44	111.45	112.09	116.42	117.98	116.30	119.12	113.37	113.02	111.57	

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<u>OOLOGAH LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	138.35	147.69	102.84	99.94	110.41	221.10	291.94	318.35	307.90	151.90	54.19	99.65	2044.3
FY 2003	5.78	0.45	10.68	20.37	28.26	290.19	174.83	400.92	153.76	29.44	92.81	172.37	1379.85
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	123.12	135.94	138.58	108.80	115.43	271.77	290.48	293.16	315.53	220.86	61.62	43.97	2119.3
FY 2003	0.00	0.00	0.00	0.00	0.00	119.47	283.54	265.81	272.36	14.36	0.00	223.92	1179.46
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.23	2.46	1.51	1.36	1.38	2.74	3.63	5.09	5.05	3.43	3.33	4.45	37.66
FY 2003	2.31	0.38	1.30	0.14	1.44	3.12	3.04	5.83	4.14	1.68	7.38	2.98	33.74
DEVIATION	-0.92	-2.08	-0.21	-1.22	0.06	0.38	-0.59	0.74	-0.91	-1.75	4.05	-1.47	-3.92
<u>POOL ELEVATION</u>													
END OF MONTH	637.26	636.83	636.99	637.41	638.09	642.78	639.09	642.51	638.39	638.03	640.20	638.12	
MAXIMUM	637.44	637.26	637.16	637.56	638.09	642.80	642.83	643.07	642.51	638.39	640.20	642.76	
MINIMUM	637.04	636.81	636.59	636.89	637.34	638.06	636.49	638.03	638.15	637.83	637.49	638.04	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	529.87	517.18	521.73	534.40	555.07	713.17	586.82	703.50	564.56	553.17	623.46	556.02	

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<u>PENSACOLA LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	343.47	380.72	306.67	279.32	341.82	539.11	689.42	760.39	738.27	400.51	182.66	265.01	5227.4
FY 2003	25.98	20.63	50.18	41.46	85.29	342.15	346.91	737.66	333.03	87.87	60.70	342.95	2474.81
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	323.79	422.85	416.25	318.47	369.18	642.13	701.38	755.89	670.30	489.31	260.52	233.61	5603.7
FY 2003	18.70	15.71	17.89	67.66	65.31	260.75	308.66	668.35	313.87	129.76	122.73	323.53	2312.93
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.47	2.76	1.85	1.69	1.75	3.11	3.90	5.10	5.02	3.40	3.40	4.41	39.86
FY 2003	2.55	0.44	1.35	0.16	1.51	2.55	3.14	4.06	3.48	1.46	4.53	2.97	28.20
DEVIATION	-0.92	-2.32	-0.50	-1.53	-0.24	-0.56	-0.76	-1.04	-1.54	-1.94	1.13	-1.44	-11.66
<u>POOL ELEVATION</u>													
END OF MONTH	741.01	741.01	741.67	740.98	741.36	742.97	743.45	744.57	744.54	743.02	741.11	741.23	
MAXIMUM	741.01	741.07	741.69	741.80	741.92	743.35	743.51	745.69	745.46	744.68	743.02	742.39	
MINIMUM	740.58	740.87	740.82	740.84	740.93	741.36	741.89	742.53	744.24	743.02	740.39	740.95	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	1494.43	1494.43	1522.81	1493.16	1509.48	1579.68	1601.25	1652.22	1650.84	1581.90	1498.73	1503.89	

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<u>SKIATOOK LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1936 THRU 2003	11.88	10.40	7.12	5.81	9.21	19.93	22.54	31.76	20.11	8.92	4.30	10.62	162.6
FY 2003	0.01	0.00	2.39	0.25	2.02	38.90	5.00	6.87	6.82	0.84	6.05	6.19	75.33
<u>RELEASES(1000AC.FT.)</u>													
AVG 1989 THRU 2003	5.86	4.07	3.07	9.40	7.50	21.84	19.00	34.12	27.64	17.66	10.23	7.30	167.7
FY 2003	5.71	2.07	1.71	1.78	1.54	0.38	2.23	3.55	3.67	6.81	7.17	3.70	40.31
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.99	2.33	1.42	1.34	1.45	2.55	3.30	4.77	4.35	3.11	3.20	4.22	35.03
FY 2003	2.60	0.44	1.73	0.04	1.36	3.73	1.66	4.42	4.29	0.80	6.79	4.68	32.54
DEVIATION	-0.39	-1.89	0.31	-1.30	-0.09	1.18	-1.64	-0.35	-0.06	-2.31	3.59	0.46	-2.49
<u>POOL ELEVATION</u>													
END OF MONTH	708.90	708.25	708.20	707.72	707.65	711.42	711.22	711.13	710.98	709.53	708.82	708.73	
MAXIMUM	709.99	708.90	708.33	708.21	707.72	711.44	711.45	711.31	711.19	711.05	709.65	709.13	
MINIMUM	708.90	708.25	708.08	707.71	707.51	707.65	711.22	710.91	710.61	709.53	708.48	708.71	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	272.54	266.56	266.10	261.74	261.11	296.65	294.66	293.76	292.28	278.43	271.80	270.98	

Summary of Lake Conditions for Water Year 2003  
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ARKANSAS/RED RIVER BASNS

<u>TENKILLER FERRY LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	55.95	82.02	93.46	89.06	103.40	147.45	169.83	177.95	119.87	49.22	35.85	35.22	1159.3
FY 2003	13.09	14.08	30.50	38.98	43.24	70.71	36.99	95.70	57.92	18.64	12.48	24.99	457.33
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	47.89	68.09	102.13	112.99	86.85	139.31	165.54	125.15	104.67	77.94	46.58	31.04	1108.2
FY 2003	20.16	20.09	31.57	59.98	34.59	32.12	22.33	80.36	53.95	65.04	56.92	15.80	492.90
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.69	3.21	2.57	2.15	2.61	3.58	4.42	5.53	4.61	2.97	3.30	4.20	42.84
FY 2003	2.49	0.59	3.84	0.16	2.31	2.10	1.89	5.08	4.19	2.01	3.24	2.57	30.47
DEVIATION	-1.20	-2.62	1.27	-1.99	-0.30	-1.48	-2.53	-0.45	-0.42	-0.96	-0.06	-1.63	-12.37
<u>POOL ELEVATION</u>													
END OF MONTH	629.97	629.34	629.17	627.33	627.94	630.86	631.81	632.66	632.55	628.30	624.15	624.66	
MAXIMUM	630.69	630.23	629.36	629.97	627.99	630.86	632.10	634.47	633.24	632.55	628.44	625.30	
MINIMUM	629.72	629.28	628.39	627.30	626.15	627.94	630.86	631.72	632.38	628.30	623.94	624.15	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	628.33	620.58	618.49	595.86	603.36	639.28	651.61	662.75	661.30	607.79	558.54	564.46	

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<u>TORONTO LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1922 THRU 2003	21.59	23.64	15.20	12.31	17.93	35.51	48.88	46.27	51.16	29.26	10.75	20.78	333.3
FY 2003	2.72	1.52	0.84	0.06	4.89	60.02	63.81	21.50	10.06	0.75	7.74	23.47	197.37
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	23.76	29.46	21.25	10.78	20.02	43.61	42.66	43.52	54.17	19.13	12.33	11.52	332.2
FY 2003	0.54	0.26	0.26	5.39	4.12	51.73	50.15	33.95	7.26	2.56	0.50	27.82	184.55
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.84	2.01	1.29	0.99	1.06	2.44	3.11	4.30	5.10	3.69	3.67	3.97	34.47
FY 2003	5.83	0.26	0.22	0.04	1.12	2.18	3.75	3.45	3.61	1.09	6.65	2.53	30.73
DEVIATION	2.99	-1.75	-1.07	-0.95	0.06	-0.26	0.64	-0.85	-1.49	-2.60	2.98	-1.44	-3.74
<u>POOL ELEVATION</u>													
END OF MONTH	901.37	901.70	901.83	899.58	899.81	902.66	906.54	902.22	902.81	901.46	903.57	901.65	
MAXIMUM	901.37	901.76	901.86	901.85	900.92	912.50	911.19	906.54	904.19	902.84	903.57	907.10	
MINIMUM	900.63	901.37	901.67	899.54	899.55	899.81	901.50	901.61	902.16	901.46	900.71	901.65	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	20.69	21.56	21.91	16.27	16.79	24.20	36.60	22.98	24.62	20.92	26.82	21.43	

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ARKANSAS/RED RIVER BASNS

WISTER LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1939 THRU 2003	30.97	66.35	85.49	78.25	103.64	126.21	120.36	140.00	59.14	18.19	7.79	17.19	853.6
FY 2003	1.20	0.95	59.70	33.03	50.23	82.91	12.40	20.23	28.49	2.98	1.88	4.90	298.90
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	20.64	50.07	114.87	103.35	95.22	125.69	104.56	114.48	96.68	17.76	6.67	9.99	860.0
FY 2003	2.93	2.90	6.66	67.70	36.08	94.07	9.88	17.22	27.15	1.36	0.56	1.13	267.63
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.53	3.63	3.07	2.63	3.13	3.93	4.56	6.07	4.02	3.57	3.26	4.02	45.42
FY 2003	2.54	1.18	3.67	0.16	1.97	1.84	1.18	2.81	3.58	1.67	2.22	2.20	25.02
DEVIATION	-0.99	-2.45	0.60	-2.47	-1.16	-2.09	-3.38	-3.26	-0.44	-1.90	-1.04	-1.82	-20.40
<u>POOL ELEVATION</u>													
END OF MONTH	475.99	475.55	482.21	478.06	479.77	478.12	478.12	478.20	478.10	477.76	477.51	477.76	
MAXIMUM	476.48	476.05	482.21	483.22	480.16	481.83	478.45	478.84	478.93	478.11	477.81	477.84	
MINIMUM	475.99	475.55	475.47	478.02	478.06	477.91	478.01	477.94	478.06	477.76	477.27	477.49	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	47.51	44.78	97.28	61.89	75.44	62.35	62.35	62.96	62.20	59.71	57.92	59.71	

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NEWT GRAHM L&D	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	285.28	240.51	190.11	189.47	184.48	377.30	507.52	566.96	527.43	279.13	101.31	146.55	3596.0
FY 2003	31.00	21.28	32.81	32.39	32.67	424.57	436.47	681.83	601.40	79.84	67.20	411.58	2853.03
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	241.85	275.82	277.34	229.76	260.63	552.73	554.97	625.41	589.25	355.60	115.38	108.62	4187.4
FY 2003	30.89	21.07	32.61	32.14	32.37	425.30	434.71	680.14	599.24	79.15	67.49	410.31	2845.42
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.18	2.46	1.56	1.43	1.55	2.71	3.57	4.93	4.64	3.12	3.11	4.34	36.60
FY 2003	2.23	0.32	2.05	0.05	1.45	3.84	1.87	5.46	4.93	1.14	7.93	3.94	35.21
DEVIATION	-0.95	-2.14	0.49	-1.38	-0.10	1.13	-1.70	0.53	0.29	-1.98	4.82	-0.40	-1.39
<u>POOL ELEVATION</u>													
END OF MONTH	532.59	532.58	532.60	532.63	532.75	532.01	532.72	532.19	532.76	532.63	532.11	532.65	
MAXIMUM	532.91	532.77	532.83	532.85	532.85	532.88	532.85	532.95	532.95	532.88	533.04	533.02	
MINIMUM	532.47	532.44	532.37	532.50	532.49	531.81	531.97	531.11	531.89	531.90	531.89	531.76	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	24.40	24.38	24.41	24.46	24.64	23.50	24.60	23.78	24.66	24.46	23.66	24.49	

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ROBERT S KERR L&D	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1943 THRU 2003	1429.39	1493.27	1423.22	1325.22	1446.42	2605.40	2892.03	3519.35	3117.24	2130.65	1021.92	1134.74	23538.9
FY 2003	789.93	484.57	330.55	542.98	483.08	1803.40	1529.87	2490.98	1893.15	654.16	700.87	1118.10	12821.64
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1374.69	1708.79	1771.40	1624.26	1599.96	3184.85	3229.46	3697.01	3355.23	1981.82	985.09	805.04	25317.6
FY 2003	773.53	509.17	298.49	537.66	481.60	1801.56	1507.06	2473.73	1875.84	638.22	674.57	1098.14	12669.56
<u>RAINFALL (INCHES)</u>													
AVG 1930 THRU 2003	3.75	3.20	2.56	2.13	2.65	3.54	4.49	5.72	4.47	3.07	3.10	4.15	42.83
FY 2003	2.70	0.77	4.00	0.13	2.17	2.28	1.65	4.38	3.57	1.10	2.81	3.22	28.78
DEVIATION	-1.05	-2.43	1.44	-2.00	-0.48	-1.26	-2.84	-1.34	-0.90	-1.97	-0.29	-0.93	-14.05
<u>POOL ELEVATION</u>													
END OF MONTH	460.01	459.25	459.90	459.90	459.84	459.60	459.72	459.76	459.75	459.56	459.71	459.86	
MAXIMUM	460.29	460.04	460.10	460.12	460.14	460.26	460.11	460.37	460.18	460.15	460.17	460.02	
MINIMUM	459.23	459.00	459.25	459.51	459.55	459.30	459.04	459.39	459.16	459.24	459.48	459.50	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	526.14	493.36	521.38	521.38	518.79	508.45	513.62	515.34	514.91	506.72	513.19	519.65	

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W. D. MAYO L&D	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1943 THRU 2003	1439.76	1542.07	1425.58	1356.86	1455.40	2630.22	2942.14	3504.45	3063.85	2087.57	1001.83	1107.59	23557.3
FY 2003	614.79	442.92	268.17	471.68	414.55	1611.30	1384.78	2242.74	1745.28	591.68	600.01	1035.49	11423.37
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1411.74	1716.19	1792.88	1660.30	1597.77	3182.10	3208.97	3645.88	3336.73	1977.44	986.68	807.02	25323.7
FY 2003	614.78	443.00	267.97	471.33	414.53	1610.82	1386.86	2242.13	1744.87	591.83	599.05	1035.07	11422.23
<u>RAINFALL (INCHES)</u>													
AVG 1930 THRU 2003	3.48	3.51	2.64	2.25	2.82	3.72	4.45	5.58	4.09	3.02	2.98	3.90	42.44
FY 2003	2.22	0.96	4.81	0.16	2.16	1.37	2.23	4.20	2.67	1.32	1.72	5.11	28.93
DEVIATION	-1.26	-2.55	2.17	-2.09	-0.66	-2.35	-2.22	-1.38	-1.42	-1.70	-1.26	1.21	-13.51
<u>POOL ELEVATION</u>													
END OF MONTH	412.53	412.37	412.45	412.59	412.52	412.62	412.53	412.68	412.68	412.13	412.45	412.54	
MAXIMUM	412.95	413.08	413.12	412.90	413.04	412.96	413.08	412.90	412.96	413.12	413.07	412.97	
MINIMUM	411.69	412.01	0.00	411.60	411.90	412.00	411.94	410.97	412.00	0.00	0.00	411.93	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	15.02	14.77	14.90	15.12	15.01	15.17	15.02	15.26	15.26	14.39	14.90	15.04	

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<u>CHOUTEAU L&amp;D</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1923 THRU 2003	287.57	253.70	202.61	192.55	188.04	392.24	515.97	577.68	540.71	283.01	102.64	151.31	3688.0
FY 2003	31.74	22.10	30.70	30.96	32.05	447.68	435.97	699.18	621.43	81.52	73.09	419.61	2926.04
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	244.28	293.62	292.98	238.98	270.80	574.06	577.21	656.20	623.85	365.57	118.65	107.59	4363.8
FY 2003	31.33	21.63	30.51	30.46	31.82	447.16	434.92	699.82	620.81	80.30	71.63	419.03	2919.40
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.62	2.94	2.10	1.91	2.06	3.06	4.03	5.32	4.88	2.95	2.95	4.19	40.01
FY 2003	2.92	0.44	3.15	0.07	2.13	3.53	1.35	3.97	3.86	0.42	7.08	1.98	30.90
DEVIATION	-0.70	-2.50	1.05	-1.84	0.07	0.47	-2.68	-1.35	-1.02	-2.53	4.13	-2.21	-9.11
<u>POOL ELEVATION</u>													
END OF MONTH	511.56	511.56	511.51	511.58	511.58	511.50	511.50	511.40	511.20	511.26	511.35	511.29	
MAXIMUM	511.80	511.72	511.77	511.72	511.82	532.29	511.78	511.91	513.13	513.22	532.51	511.43	
MINIMUM	511.40	511.38	511.45	511.45	511.46	511.07	511.09	511.02	510.00	511.02	510.44	510.87	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	23.84	23.84	23.73	23.89	23.89	23.70	23.70	23.48	23.02	23.16	23.36	23.23	

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<u>WEBBERS FALLS L&amp;D</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1940 THRU 2003	1120.20	1171.71	983.47	851.97	910.52	1714.69	1936.37	2372.71	2250.71	1688.18	858.44	701.58	16560.6
FY 2003	699.08	406.52	232.07	271.94	265.00	1568.06	1330.93	2223.40	1603.46	472.97	398.98	1004.94	10477.34
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1125.36	1278.78	1210.16	1024.19	1047.35	2287.09	2371.87	2628.83	2512.04	1586.27	728.29	608.46	18408.7
FY 2003	683.58	413.05	227.05	270.92	262.27	1560.72	1332.37	2213.69	1605.08	463.11	388.48	1001.53	10421.88
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.62	2.92	2.12	1.89	2.17	3.10	4.10	5.37	4.78	2.88	2.87	4.17	39.99
FY 2003	3.28	0.48	3.27	0.11	2.21	3.23	1.21	3.57	3.47	0.74	5.77	2.60	29.94
DEVIATION	-0.34	-2.44	1.15	-1.78	0.04	0.13	-2.89	-1.80	-1.31	-2.14	2.90	-1.57	-10.05
<u>POOL ELEVATION</u>													
END OF MONTH	490.26	489.52	489.86	489.81	489.95	490.27	489.73	490.15	489.55	489.80	490.25	490.18	
MAXIMUM	490.61	490.60	490.72	490.27	490.23	490.55	490.31	490.47	490.40	490.25	490.50	490.35	
MINIMUM	488.09	489.20	489.14	489.03	489.23	488.94	489.42	489.29	488.93	488.73	487.57	489.22	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	173.26	164.65	168.51	167.95	169.54	173.38	167.04	171.92	164.99	167.83	173.14	172.29	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>ALTUS RESERVOIR</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1938 THRU 2003	7.81	4.14	4.67	5.37	6.73	8.82	11.40	26.04	21.07	6.74	3.61	4.20	110.6
FY 2003	9.76	7.32	8.92	7.70	6.54	7.01	6.40	7.43	7.83	0.91	0.55	8.10	78.46
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	0.31	2.18	2.33	2.33	3.50	5.72	6.41	14.85	9.45	3.93	3.33	0.18	54.5
FY 2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.15	0.84	0.72	0.63	0.90	1.38	2.04	3.96	3.21	2.07	2.34	2.25	22.49
FY 2003	6.32	0.32	1.19	0.00	0.37	0.85	1.37	2.29	4.95	0.67	2.63	3.03	23.99
DEVIATION	4.17	-0.52	0.47	-0.63	-0.53	-0.53	-0.67	-1.67	1.74	-1.40	0.29	0.78	1.50
<u>POOL ELEVATION</u>													
END OF MONTH	1531.65	1534.56	1537.68	1540.04	1541.83	1543.48	1544.72	1546.07	1547.46	1539.31	1527.39	1530.60	
MAXIMUM	1531.65	1534.56	1537.68	1540.04	1541.83	1543.48	1544.72	1546.07	1547.46	1547.49	1539.31	1530.70	
MINIMUM	1527.13	1531.65	1534.56	1537.68	1540.04	1540.00	1543.48	1544.72	1140.67	1539.31	1527.36	733.35	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	23.94	31.06	39.65	46.91	52.88	58.73	63.33	68.57	74.30	44.60	14.96	21.57	

<u>ARBUCKLE RESERVOIR</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	3.55	3.60	4.50	4.17	5.55	7.71	8.94	13.27	7.79	2.72	1.79	3.92	67.5
FY 2003	2.00	0.92	9.48	3.46	3.42	5.00	2.57	4.41	2.96	0.14	1.19	2.04	37.59
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1.57	2.13	4.53	5.01	4.44	8.12	7.47	10.91	8.46	1.18	0.42	1.94	56.2
FY 2003	0.06	0.06	5.05	5.78	2.30	3.90	0.06	2.11	0.90	0.06	0.06	0.06	20.40
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.58	2.30	2.00	1.67	2.17	2.93	3.69	5.69	3.88	2.41	2.54	3.72	36.58
FY 2003	4.09	0.62	4.97	0.02	2.71	1.44	1.66	4.73	5.19	0.34	3.20	4.93	33.90
DEVIATION	0.51	-1.68	2.97	-1.65	0.54	-1.49	-2.03	-0.96	1.31	-2.07	0.66	1.21	-2.68
<u>POOL ELEVATION</u>													
END OF MONTH	872.55	872.43	873.81	872.40	872.39	872.19	872.53	872.72	872.76	871.60	870.91	870.96	
MAXIMUM	872.55	872.65	873.81	873.81	872.69	872.60	872.53	873.36	872.88	872.76	871.60	871.12	
MINIMUM	872.17	872.43	872.39	872.15	872.21	872.12	872.19	872.47	872.56	871.60	870.62	870.75	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	73.71	73.42	76.75	73.35	73.33	72.85	73.66	74.11	74.21	71.47	69.88	69.99	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>BROKEN BOW LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1930 THRU 2003	45.35	77.76	103.45	103.49	113.09	134.94	119.36	131.77	52.43	26.27	11.61	21.46	941.0
FY 2003	25.71	16.76	112.91	36.84	73.73	97.10	24.45	30.70	35.75	7.05	3.38	9.26	473.65
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	31.89	55.91	102.68	95.44	82.09	113.70	96.92	99.22	78.43	52.84	40.45	29.54	879.1
FY 2003	11.13	6.07	28.85	88.75	57.12	43.39	17.30	17.48	16.66	46.27	74.24	20.29	427.56
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	4.28	4.18	4.03	3.47	3.73	4.79	5.15	6.50	4.33	4.41	3.55	4.36	52.78
FY 2003	5.07	1.34	4.78	0.21	3.18	2.04	1.79	3.01	5.22	2.62	2.24	3.16	34.66
DEVIATION	0.79	-2.84	0.75	-3.26	-0.55	-2.75	-3.36	-3.49	0.89	-1.79	-1.31	-1.20	-18.12
<u>POOL ELEVATION</u>													
END OF MONTH	591.61	592.26	598.34	594.46	595.59	599.25	599.37	599.97	600.91	597.64	592.02	590.81	
MAXIMUM	591.63	592.57	598.34	599.11	595.65	600.41	600.89	600.27	601.28	600.91	597.79	592.11	
MINIMUM	590.32	591.61	592.15	594.40	592.77	595.59	598.78	599.36	599.82	597.64	591.99	590.81	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	810.32	818.88	901.73	848.29	863.65	914.54	916.25	924.75	938.21	891.94	815.70	799.85	

<u>SARDIS LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	11.45	19.36	25.10	23.45	28.90	33.50	40.81	42.45	19.90	7.26	3.32	9.23	264.7
FY 2003	2.47	1.23	26.33	6.05	15.44	34.65	7.14	10.82	5.62	2.63	2.50	4.39	119.28
<u>RELEASES(1000AC.FT.)</u>													
AVG 1985 THRU 2003	6.66	29.38	33.95	29.66	25.36	38.18	36.59	40.18	27.70	4.34	4.58	3.46	280.1
FY 2003	0.00	0.00	0.98	15.33	13.97	32.16	0.00	4.79	0.00	0.00	0.00	0.00	67.23
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.61	3.45	2.81	2.53	2.98	3.69	4.66	6.16	4.27	3.52	3.17	4.38	45.23
FY 2003	4.11	1.39	4.99	0.06	2.34	3.01	1.46	3.73	4.00	1.68	1.93	4.13	32.83
DEVIATION	0.50	-2.06	2.18	-2.47	-0.64	-0.68	-3.20	-2.43	-0.27	-1.84	-1.24	-0.25	-12.40
<u>POOL ELEVATION</u>													
END OF MONTH	598.39	598.25	599.96	599.12	599.10	598.93	598.96	598.99	598.96	598.48	598.16	598.09	
MAXIMUM	598.44	598.49	600.01	599.96	599.61	600.70	599.06	599.32	599.05	598.97	598.53	598.39	
MINIMUM	598.26	598.25	598.21	599.09	599.08	598.93	598.87	598.92	598.87	598.48	598.14	598.09	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	266.17	264.29	287.65	276.00	275.72	273.40	273.80	274.20	273.80	267.37	263.08	262.15	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

DENISON DAM	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1906 THRU 2003	375.69	225.23	222.40	175.75	222.69	321.81	462.27	832.81	746.50	247.19	170.19	247.00	4249.5
FY 2003	131.70	178.22	229.00	122.62	108.50	157.49	94.81	283.34	386.19	93.05	4.07	117.17	1906.14
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	236.19	256.43	262.57	344.31	252.77	482.34	399.25	586.65	872.31	380.96	222.73	182.96	4479.5
FY 2003	65.30	67.41	167.93	417.40	156.33	61.17	32.12	131.95	115.93	209.32	200.09	96.21	1721.15
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.57	1.37	1.15	1.10	1.29	1.73	2.40	4.34	3.48	2.14	2.27	2.92	26.76
FY 2003	4.53	0.68	2.29	0.06	0.71	0.88	1.31	2.58	4.78	0.28	2.11	1.89	22.10
DEVIATION	1.96	-0.69	1.14	-1.04	-0.58	-0.85	-1.09	-1.76	1.30	-1.86	-0.16	-1.03	-4.66
<u>POOL ELEVATION</u>													
END OF MONTH	616.51	617.51	618.06	614.33	613.57	614.59	614.97	616.45	619.08	617.12	614.01	614.03	
MAXIMUM	616.51	617.74	618.08	618.31	614.54	614.60	615.01	616.45	619.10	619.34	617.12	614.37	
MINIMUM	615.27	616.51	616.96	614.29	613.52	613.48	614.59	614.41	616.45	617.12	614.01	613.91	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	2538.96	2625.35	2673.97	2364.84	2307.90	2384.67	2413.65	2533.89	2766.48	2590.96	2340.44	2341.97	

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FOSS RESERVOIR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	4.15	2.83	2.12	2.37	2.84	4.72	9.27	16.04	12.72	4.10	3.37	3.42	67.9
FY 2003	6.92	5.22	6.03	2.75	4.11	6.40	6.83	4.25	12.48	1.28	2.24	1.97	60.47
<u>RELEASES(1000AC.FT.)</u>													
AVG 1978 THRU 2003	3.10	1.42	1.49	3.06	2.70	3.16	4.29	5.81	8.44	4.40	2.94	1.89	42.7
FY 2003	0.31	0.30	0.44	6.95	0.79	1.10	3.35	2.75	4.87	1.71	0.31	0.30	23.18
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	1.91	0.99	0.67	0.59	0.84	1.39	2.12	3.98	3.18	1.94	2.38	2.51	22.50
FY 2003	6.99	0.28	0.89	0.01	0.42	0.91	2.16	1.92	5.63	0.50	4.47	1.75	25.93
DEVIATION	5.08	-0.71	0.22	-0.58	-0.42	-0.48	0.04	-2.06	2.45	-1.44	2.09	-0.76	3.43
<u>POOL ELEVATION</u>													
END OF MONTH	1640.74	1641.26	1641.93	1641.09	1641.41	1641.86	1641.87	1641.58	1642.16	1641.26	1640.81	1640.56	
MAXIMUM	1640.74	1641.26	1641.93	1641.94	1641.41	1641.92	1641.90	1641.87	1642.53	1642.16	1641.26	1641.91	
MINIMUM	1639.75	1640.74	1641.26	1641.09	1641.01	1641.41	1641.45	1641.35	1641.57	1641.26	1640.74	1640.56	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	169.54	172.96	177.43	171.82	173.96	176.96	177.03	175.09	179.00	172.96	169.99	168.37	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

<u>FORT COBB</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	2.51	2.54	2.91	2.45	2.64	3.76	3.76	5.31	5.78	5.57	4.49	2.92	44.6
FY 2003	4.56	1.97	3.52	1.27	2.14	3.75	2.84	2.46	5.69	1.01	1.33	0.13	30.67
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	1.01	1.54	1.49	1.86	1.79	3.32	2.40	3.38	8.39	1.79	0.71	0.66	28.3
FY 2003	0.00	0.00	0.00	0.00	0.00	3.19	0.00	0.00	1.52	0.00	0.00	0.00	4.71
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	2.55	1.43	1.16	0.98	1.21	1.78	2.54	4.81	3.85	2.19	2.40	3.18	28.08
FY 2003	5.36	0.46	2.06	0.03	0.69	0.78	1.88	2.14	6.08	1.30	2.89	0.82	24.49
DEVIATION	2.81	-0.97	0.90	-0.95	-0.52	-1.00	-0.66	-2.67	2.23	-0.89	0.49	-2.36	-3.59
<u>POOL ELEVATION</u>													
END OF MONTH	1341.66	1341.76	1342.24	1342.17	1342.44	1342.13	1342.27	1342.14	1342.43	1341.72	1341.13	1340.47	
MAXIMUM	1341.70	1341.82	1342.26	1342.39	1342.48	1342.55	1342.36	1342.38	1342.97	1342.48	1341.72	1341.13	
MINIMUM	1340.76	1341.66	1341.73	1342.06	1342.15	1342.10	1342.10	1342.14	1342.10	1341.72	1341.05	1340.45	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	72.57	72.94	74.77	74.50	75.55	74.34	74.88	74.38	75.51	72.79	70.60	68.23	

<u>HUGO LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1926 THRU 2003	62.84	111.94	152.61	148.47	179.91	208.33	243.24	250.80	119.38	43.10	19.01	49.48	1589.1
FY 2003	15.44	10.02	100.56	73.96	68.18	173.90	25.39	28.37	30.14	7.39	17.03	10.61	561.00
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	53.33	124.98	173.81	169.74	167.57	226.15	221.55	216.65	154.37	55.09	41.88	28.43	1633.5
FY 2003	8.61	4.94	29.65	88.38	3.64	229.84	14.42	23.33	16.37	18.90	41.40	13.82	493.31
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.75	3.71	3.06	2.77	3.21	3.92	4.88	6.20	4.26	3.50	3.16	4.35	46.77
FY 2003	5.06	1.35	5.51	0.09	2.67	2.14	1.70	3.24	5.61	1.58	2.40	3.91	35.26
DEVIATION	1.31	-2.36	2.45	-2.68	-0.54	-1.78	-3.18	-2.96	1.35	-1.92	-0.76	-0.44	-11.51
<u>POOL ELEVATION</u>													
END OF MONTH	403.20	403.38	408.39	407.27	411.30	407.38	407.65	407.58	408.07	406.67	404.37	403.73	
MAXIMUM	403.23	403.57	408.39	409.09	411.30	412.25	407.90	407.93	408.09	408.07	406.67	404.55	
MINIMUM	402.66	403.18	403.34	406.66	407.24	407.34	407.33	407.50	407.34	406.67	404.35	403.71	
<u>POOL CONTENT-EOM</u> (1000AC.FT)	141.85	144.15	213.08	196.71	259.06	198.30	202.22	201.20	208.33	188.17	156.91	148.61	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

MCGEE CREEK	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS (1000AC.FT.)</u>													
AVG 1938 THRU 2003	5.57	8.87	10.12	8.14	13.47	17.62	20.14	21.43	11.17	3.69	2.11	4.46	126.8
FY 2003	1.95	0.70	13.50	4.06	10.66	14.73	3.37	4.41	12.43	2.48	2.53	2.41	73.23
<u>RELEASES (1000AC.FT.)</u>													
AVG 1989 THRU 2003	2.79	12.24	20.12	16.76	14.26	26.40	21.69	26.64	16.47	4.33	2.96	3.35	168.0
FY 2003	0.85	0.82	0.85	4.84	3.47	15.04	0.83	0.85	0.82	0.84	0.83	0.80	30.82
<u>RAINFALL (INCHES)</u>													
AVG 1930 THRU 2003	2.38	1.81	1.26	2.21	3.07	3.45	4.92	5.93	4.29	3.34	2.99	4.51	40.16
FY 2003	4.02	1.22	4.78	0.04	2.60	2.09	1.06	3.04	5.89	0.42	1.88	4.26	31.30
DEVIATION	1.64	-0.59	3.52	-2.17	-0.47	-1.36	-3.86	-2.89	1.60	-2.92	-1.11	-0.25	-8.86
<u>POOL ELEVATION</u>													
END OF MONTH	175.45	175.34	176.24	175.99	176.41	176.02	175.72	175.38	175.69	175.01	174.41	174.09	
MAXIMUM	175.52	175.47	176.24	176.32	176.44	176.41	176.02	175.72	175.70	175.69	175.01	174.46	
MINIMUM	175.43	175.34	175.32	175.99	175.98	175.95	175.72	175.38	175.17	175.01	174.41	174.09	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	108.49	107.16	118.29	115.04	120.51	115.42	111.77	107.64	111.40	103.16	96.41	92.82	

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TOM STEED RESERVOIR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS (1000AC.FT.)</u>													
AVG 1926 THRU 2003	2.21	0.71	0.74	0.59	0.85	1.75	1.92	6.82	5.14	1.28	1.11	2.17	25.3
FY 2003	6.82	0.73	1.72	0.39	0.70	0.00	0.96	1.47	20.52	0.18	1.85	0.16	35.49
<u>RELEASES (1000AC.FT.)</u>													
AVG 1981 THRU 2003	0.54	0.94	0.63	0.19	0.64	0.91	0.36	2.53	2.23	0.27	0.28	0.24	9.7
FY 2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>RAINFALL (INCHES)</u>													
AVG 1930 THRU 2003	2.65	1.29	1.10	1.00	1.19	1.69	2.34	4.68	3.51	2.13	2.21	2.92	26.71
FY 2003	5.27	0.65	2.09	0.00	0.69	0.59	1.86	3.41	7.84	0.30	2.74	1.11	26.55
DEVIATION	2.62	-0.64	0.99	-1.00	-0.50	-1.10	-0.48	-1.27	4.33	-1.83	0.53	-1.81	-0.16
<u>POOL ELEVATION</u>													
END OF MONTH	1404.58	1404.35	1404.45	1404.23	1404.13	1403.88	1403.55	1403.25	1406.52	1405.62	1405.15	1404.46	
MAXIMUM	1404.58	1404.67	1404.52	1404.49	1404.23	1404.13	1403.88	1403.55	1406.54	1406.52	1405.62	1405.15	
MINIMUM	1403.41	1404.35	1404.26	1404.23	1404.13	1403.88	1403.55	1403.08	1403.21	1405.62	1404.86	1404.46	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	61.86	60.75	61.23	60.17	59.69	58.51	56.99	55.60	71.66	67.01	64.64	61.28	

Summary of Lake Conditions for Water Year 2003  
Tulsa District  
ARKANSAS/RED RIVER BASNS

PAT MAYSE LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1938 THRU 2003	5.08	8.86	11.35	7.67	14.90	15.53	14.54	17.79	11.27	3.42	1.36	3.44	115.2
FY 2003	18.19	2.50	14.37	4.20	10.81	6.61	3.12	4.11	5.58	0.05	0.84	1.39	71.78
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	0.77	4.72	9.66	8.20	9.90	16.12	12.01	12.42	12.06	3.90	0.72	0.31	90.8
FY 2003	1.96	2.68	2.78	8.23	2.46	8.63	2.33	0.24	0.51	0.31	0.00	0.00	30.13
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.54	3.37	2.97	2.63	3.13	3.84	4.46	5.37	4.04	3.28	2.47	3.82	42.92
FY 2003	8.10	1.01	4.87	0.02	2.64	1.16	0.47	2.06	5.52	0.77	2.13	3.02	31.50
DEVIATION	4.56	-2.36	1.90	-2.61	-0.49	-2.68	-3.99	-3.31	1.48	-2.51	-0.34	-0.80	-11.42
<u>POOL ELEVATION</u>													
END OF MONTH	451.68	451.05	452.61	451.41	452.48	451.69	451.13	451.16	451.37	450.46	449.82	449.42	
MAXIMUM	451.99	451.94	452.61	453.11	452.48	452.82	451.70	451.27	451.45	451.39	450.46	449.96	
MINIMUM	449.16	451.05	450.98	451.41	451.22	451.69	451.13	450.81	450.98	450.46	449.82	449.42	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	122.23	118.41	128.01	120.59	127.19	122.29	118.90	119.08	120.35	114.96	111.25	108.98	

PINE CREEK LAKE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INFLOWS(1000AC.FT.)</u>													
AVG 1930 THRU 2003	30.42	51.67	70.02	65.75	83.37	91.62	93.40	108.50	43.83	16.94	8.58	22.22	686.3
FY 2003	8.89	10.14	64.90	26.78	34.22	78.94	12.55	16.57	13.40	4.02	2.00	6.46	278.85
<u>RELEASES(1000AC.FT.)</u>													
AVG 1976 THRU 2003	30.38	63.45	85.43	75.24	73.98	102.38	80.03	102.39	62.78	18.28	13.28	19.76	727.4
FY 2003	4.11	16.73	44.40	42.46	25.78	65.56	10.57	14.38	10.77	10.22	5.06	10.09	260.13
<u>RAINFALL(INCHES)</u>													
AVG 1930 THRU 2003	3.78	3.77	3.39	3.01	3.38	4.15	4.92	6.19	4.14	3.76	3.34	4.39	48.22
FY 2003	5.52	1.53	5.73	0.13	2.98	2.15	1.92	3.66	6.10	2.14	2.73	3.92	38.51
DEVIATION	1.74	-2.24	2.34	-2.88	-0.40	-2.00	-3.00	-2.53	1.96	-1.62	-0.61	-0.47	-9.71
<u>POOL ELEVATION</u>													
END OF MONTH	439.11	437.15	442.02	438.19	440.18	442.88	442.84	442.89	443.00	440.65	439.36	438.04	
MAXIMUM	439.11	439.49	442.02	442.30	440.18	444.84	443.38	443.72	443.20	443.00	440.66	439.74	
MINIMUM	437.72	437.15	437.09	438.13	438.17	438.14	442.58	442.59	442.70	440.59	439.34	438.04	
<u>POOL CONTENT-EOM</u>													
(1000AC.FT)	58.06	50.65	70.58	54.48	62.45	74.66	74.47	74.71	75.23	64.47	59.08	53.90	



SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT

WHITE RIVER BASIN

<u>BEAVER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1968 thru 2003	41.4	108.8	114.7	92.8	117.9	185.5	176.1	131.6	86.2	24.2	14.9	27.6	1121.4
WY 2003	5.7	4.8	35.1	27.0	54.1	83.7	53.2	214.5	51.3	16.1	7.4	11.7	564.6
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1968 thru 2003	36.7	50.8	84.4	87.7	99.0	104.2	131.4	112.3	95.0	83.7	85.1	52.9	1023.4
WY 2003	99.5	45.3	44.6	56.9	38.6	15.7	16.1	111.6	58.7	97.5	117.2	21.8	723.5
<u>Basin Rainfall (inches)</u>													
Avg WY 1977 thru 2003	3.9	4.9	3.4	2.5	3.0	4.4	4.2	5.6	4.8	3.3	3.2	4.0	47.1
WY 2003	2.4	0.8	4.8	0.3	3.5	2.7	1.8	7.8	3.7	3.0	3.0	4.3	38.2
Deviation	-1.4	-4.1	1.4	-2.2	0.5	-1.7	-2.4	2.3	-1.2	-0.3	-0.2	0.3	-8.9
<u>Pool Elevation</u>													
End of Month	1117.72	1115.94	1115.45	1114.16	1114.59	1116.86	1117.88	1121.18	1120.53	1117.14	1112.52	1111.78	
Maximum	1121.35	1117.74	1116.01	1115.73	1114.69	1116.89	1117.90	1122.51	1121.58	1120.52	1117.16	1112.78	
Minimum	1117.70	1115.91	1114.75	1114.13	1113.49	1114.58	1116.87	1117.83	1120.51	1117.12	1112.46	1111.78	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	1588.5	1540.1	1527.1	1492.8	1504.2	1565.1	1592.8	1685.6	1667.1	1572.7	1450.2	1431.1	

<u>TABLE ROCK LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1961 thru 2003	98.8	226.5	276.3	240.0	292.2	416.7	434.9	383.0	253.4	143.0	112.1	106.6	2983.5
WY 2003	110.9	46.7	98.7	103.8	156.1	192.5	125.1	300.7	148.8	127.4	134.9	48.9	1594.5
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1961 thru 2003	116.8	173.2	259.9	246.9	239.1	338.9	367.9	327.4	226.8	224.2	184.1	125.2	2830.4
WY 2003	99.4	146.0	94.5	182.3	128.1	110.9	62.8	144.6	137.0	243.3	251.9	83.8	1684.7
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.3	4.2	3.2	2.2	2.6	3.8	3.9	5.1	4.4	3.4	3.3	3.9	43.5
WY 2003	2.5	0.7	3.9	0.3	3.1	2.4	2.6	4.8	3.2	2.9	3.6	4.6	34.8
Deviation	-0.8	-3.5	0.7	-1.9	0.5	-1.5	-1.4	-0.3	-1.2	-0.5	0.3	0.7	-8.8
<u>Pool Elevation</u>													
End of Month	915.00	912.45	912.38	910.27	910.77	912.44	913.54	916.77	916.61	913.41	910.12	908.87	
Maximum	915.38	914.97	912.49	912.86	910.88	912.71	913.54	917.01	917.01	916.63	913.40	910.50	
Minimum	914.94	912.45	912.05	910.24	909.37	910.69	912.43	913.54	916.48	913.41	910.09	908.81	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	2702.1	2593.9	2591.0	2504.1	2524.4	2593.5	2639.7	2778.8	2771.8	2634.2	2498.0	2447.7	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT

WHITE RIVER BASIN

<u>BULL SHOALS LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1953 thru 2003	155.6	284.7	378.4	335.4	374.3	561.6	582.4	555.4	351.4	272.1	211.0	169.8	4232.2
WY 2003	106.5	157.7	169.3	222.3	242.6	232.9	160.8	257.6	188.8	242.5	277.8	113.7	2372.3
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1953 thru 2003	232.7	192.7	315.5	349.4	348.5	415.0	414.7	364.0	338.8	428.3	378.2	253.8	4031.7
WY 2003	263.1	127.3	153.0	291.0	228.9	146.2	98.8	61.9	211.5	348.0	390.6	88.3	2408.5
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.1	4.3	3.2	2.3	2.7	3.8	3.7	4.7	3.9	3.2	3.0	3.5	41.6
WY 2003	2.6	0.8	4.2	0.3	3.0	1.7	3.1	5.4	3.2	3.7	5.5	5.1	38.6
Deviation	-0.6	-3.5	1.0	-1.9	0.3	-2.1	-0.7	0.7	-0.8	0.5	2.5	1.6	-3.0
<u>Pool Elevation</u>													
End of Month	651.91	652.28	652.37	650.51	650.54	652.10	653.00	656.79	655.78	652.84	649.72	649.82	
Maximum	655.78	652.35	652.37	652.69	651.01	652.12	653.45	656.86	657.26	655.88	653.23	650.04	
Minimum	651.72	651.81	650.95	650.21	649.69	650.51	651.82	652.99	655.76	652.80	649.71	649.12	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	2954.0	2970.6	2974.6	2892.4	2893.8	2962.5	3003.0	3176.1	3129.0	2995.8	2858.0	2862.3	

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<u>NORFORK LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1946 thru 2003	51.9	103.1	120.4	122.3	137.6	192.0	200.2	191.6	102.9	70.0	47.8	51.6	1391.3
WY 2003	32.8	27.0	55.3	53.9	82.8	91.3	101.2	114.3	53.3	32.9	29.5	36.1	710.4
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1946 thru 2003	69.0	63.1	112.5	124.0	123.6	134.3	137.4	115.1	117.0	120.8	107.8	82.9	1307.5
WY 2003	92.9	38.5	72.3	98.8	64.5	40.0	37.9	41.1	61.2	103.2	109.7	27.4	787.4
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.2	4.3	3.4	2.4	3.0	4.0	3.9	5.0	3.7	3.3	3.0	3.4	42.6
WY 2003	2.2	0.8	4.1	0.5	2.6	1.9	3.9	5.9	3.9	5.0	7.0	4.0	41.8
Deviation	-1.0	-3.5	0.7	-1.9	-0.3	-2.1	-0.0	0.9	0.2	1.7	4.0	0.6	-0.8
<u>Pool Elevation</u>													
End of Month	550.83	550.04	549.04	546.64	547.30	549.40	551.91	554.76	553.94	550.20	545.86	545.86	
Maximum	553.88	550.83	550.04	549.77	547.54	549.40	552.05	554.76	555.09	553.96	550.19	546.23	
Minimum	550.82	550.04	548.28	546.56	545.36	547.28	549.40	551.92	553.94	550.18	545.74	545.86	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	1225.6	1208.7	1187.2	1137.2	1150.8	1194.9	1249.2	1312.8	1294.3	1212.1	1121.3	1121.3	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT

WHITE RIVER BASIN

<u>CLEARWATER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1949 thru 2003	22.4	53.5	61.6	57.2	59.9	88.1	97.8	85.0	40.5	27.9	20.4	20.9	635.3
WY 2003	15.1	18.0	29.8	39.9	46.7	53.1	55.7	71.3	37.7	18.1	16.5	18.9	420.8
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1949 thru 2003	25.0	33.3	61.5	63.8	62.8	80.0	82.0	77.3	56.0	36.1	26.1	25.0	628.8
WY 2003	24.8	18.3	26.6	42.8	46.0	52.9	41.8	74.4	36.3	17.6	14.9	19.9	416.2
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.3	5.0	3.6	2.5	2.9	3.8	4.3	4.8	3.9	3.8	3.4	3.4	44.5
WY 2003	1.8	0.6	2.5	0.2	2.9	1.7	3.9	5.2	2.6	1.7	3.3	2.7	29.2
Deviation	-1.5	-4.4	-1.0	-2.3	0.1	-2.1	-0.4	0.4	-1.3	-2.0	-0.0	-0.7	-15.3
<u>Pool Elevation</u>													
End of Month	494.66	494.36	496.19	494.41	494.78	494.73	501.83	500.10	500.44	500.27	500.72	499.99	
Maximum	500.11	494.66	496.39	500.19	496.45	497.52	504.46	502.72	502.94	500.87	501.08	501.44	
Minimum	494.35	494.01	494.35	493.93	494.32	494.07	494.11	500.05	500.08	499.92	500.10	499.99	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	23.0	22.5	25.6	22.6	23.2	23.1	36.6	33.0	33.6	33.3	34.2	32.7	

<u>GREERS FERRY LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1965 thru 2003	37.8	113.0	170.6	128.9	154.4	222.3	203.5	136.5	50.7	10.8	6.2	18.9	1253.7
WY 2003	0.6	0.6	59.7	66.3	130.6	102.6	50.4	274.8	59.2	17.1	3.5	6.3	771.6
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1965 thru 2003	36.0	35.4	86.9	129.7	133.7	144.4	133.7	118.9	97.8	97.1	80.0	44.9	1138.5
WY 2003	41.7	51.2	70.4	32.2	48.5	36.7	10.5	49.5	214.1	89.5	96.0	16.1	756.4
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	4.0	5.6	4.5	3.2	3.7	4.6	4.7	5.3	4.0	3.4	2.8	3.6	49.5
WY 2003	1.9	1.6	7.0	1.0	4.5	1.9	2.3	7.9	6.3	5.5	4.4	3.1	47.5
Deviation	-2.1	-4.0	2.5	-2.2	0.7	-2.7	-2.3	2.6	2.3	2.1	1.6	-0.6	-2.0
<u>Pool Elevation</u>													
End of Month	456.69	454.67	454.20	455.19	457.79	459.68	460.63	467.24	462.13	459.38	455.93	455.28	
Maximum	458.57	456.73	454.67	455.93	458.38	459.75	460.66	467.89	467.26	462.19	459.41	456.07	
Minimum	456.59	454.67	452.54	454.23	455.04	457.60	459.69	460.64	461.92	459.33	455.85	455.25	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	1777.7	1717.1	1703.0	1732.7	1810.7	1869.1	1898.8	2113.2	1946.2	1859.8	1754.9	1735.4	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>JAMES W. TRIMBLE (L&amp;D 13)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1971 thru 2003	1573.1	2229.6	2243.2	1994.2	1964.8	3625.7	3448.2	3961.3	3615.7	1942.1	985.0	889.3	28472.2
WY 2003	781.6	534.1	358.3	682.6	625.8	1957.4	1679.9	2757.6	2129.1	688.2	778.3	1213.9	14186.8
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.3	4.5	3.4	2.4	3.0	3.9	3.7	5.0	3.8	3.2	2.2	3.0	41.4
WY 2003	1.5	1.0	4.6	0.4	2.5	1.5	1.6	2.1	4.6	0.6	3.0	3.1	26.5
Deviation	-1.8	-3.6	1.2	-1.9	-0.5	-2.4	-2.2	-2.9	0.9	-2.6	0.7	0.2	-14.9
<u>Pool Elevation</u>													
End of Month	391.63	391.47	391.63	391.61	391.32	391.43	391.83	391.81	391.63	391.70	391.16	391.72	
Maximum	392.17	392.19	392.31	392.25	392.38	392.31	392.24	392.10	392.09	392.39	392.33	392.18	
Minimum	391.06	391.06	390.98	390.83	391.05	390.52	390.99	389.27	390.87	390.92	390.89	390.82	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	56.7	55.6	56.7	56.5	54.6	55.3	58.0	57.8	56.7	57.1	53.6	57.3	

<u>OZARK-JETTA TAYLOR (L&amp;D 12)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1972 thru 2003	1616.9	2429.9	2510.6	2142.4	2188.8	4005.9	3796.1	4209.3	3811.8	2050.1	1038.7	924.3	30724.8
WY 2003	832.9	572.3	389.2	748.5	733.1	2229.3	1803.1	3074.7	2295.5	748.5	759.0	1292.8	15479.0
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.4	4.6	3.7	2.4	2.8	3.7	3.3	5.2	4.1	2.8	2.2	2.9	41.2
WY 2003	1.6	1.1	3.9	0.3	2.6	1.4	1.6	3.9	3.6	0.7	2.5	2.7	25.9
Deviation	-1.8	-3.5	0.2	-2.1	-0.2	-2.3	-1.7	-1.3	-0.4	-2.1	0.3	-0.2	-15.3
<u>Pool Elevation</u>													
End of Month	371.40	371.55	372.01	371.68	371.59	371.09	371.24	371.95	371.16	371.37	370.69	371.04	
Maximum	372.62	371.87	372.50	372.56	372.51	372.52	372.45	372.32	372.44	372.34	372.80	372.25	
Minimum	370.17	370.73	370.85	370.70	371.08	370.88	370.92	370.80	370.50	370.54	370.54	369.87	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	142.6	144.0	148.5	145.3	144.4	139.6	141.0	147.9	140.3	142.3	135.7	139.1	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT

ARKANSAS RIVER BASIN

<u>DARDANELLE (L&amp;D 10)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1966 thru 2003	1633.6	2477.3	2598.8	2282.4	2304.5	4095.9	3827.0	4147.4	3727.3	1969.1	980.5	911.4	30955.1
WY 2003	745.1	505.8	409.8	739.4	754.4	2307.4	1747.8	3090.5	2138.8	655.6	687.0	1189.6	14971.2
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.8	4.7	4.1	2.6	3.2	3.9	4.0	5.4	3.3	2.8	2.1	2.9	42.8
WY 2003	2.2	1.4	4.4	0.8	4.3	2.1	1.7	5.5	3.9	0.2	2.2	3.0	31.6
Deviation	-1.7	-3.4	0.4	-1.8	1.1	-1.8	-2.3	0.0	0.6	-2.6	0.1	0.1	-11.2
<u>Pool Elevation</u>													
End of Month	337.59	337.96	337.81	337.61	337.91	337.74	338.15	337.67	338.08	337.88	337.54	337.60	
Maximum	338.08	338.12	338.14	338.24	338.22	338.40	338.36	338.29	338.37	338.23	338.25	338.25	
Minimum	337.28	337.42	337.51	337.26	337.27	337.00	336.92	337.06	336.92	337.10	336.68	336.93	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	472.5	484.9	479.8	473.1	483.2	477.5	491.5	475.1	489.0	482.2	470.8	472.8	

<u>BLUE MOUNTAIN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1948 thru 2003	10.9	28.5	43.3	43.7	50.8	64.3	55.8	55.2	17.0	8.9	3.9	4.0	386.3
WY 2003	0.6	1.4	28.7	17.6	41.7	28.4	6.6	5.9	12.8	1.8	1.4	0.4	147.3
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1948 thru 2003	5.7	16.8	42.8	45.5	45.6	50.8	48.5	53.2	34.5	16.2	8.8	5.4	373.8
WY 2003	2.3	1.4	18.3	26.8	37.5	23.1	4.8	5.5	12.6	3.1	3.5	2.4	141.3
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	4.1	5.0	4.5	3.2	3.4	4.2	4.3	6.2	4.1	3.6	2.8	3.7	48.9
WY 2003	3.3	2.0	5.9	0.4	3.5	1.4	1.8	2.9	4.7	1.6	3.5	2.3	33.4
Deviation	-0.8	-3.0	1.3	-2.8	0.1	-2.8	-2.4	-3.2	0.6	-1.9	0.8	-1.4	-15.5
<u>Pool Elevation</u>													
End of Month	384.22	384.14	387.36	384.42	385.72	387.16	387.42	387.24	387.00	386.22	385.24	384.36	
Maximum	384.94	384.38	387.36	388.52	388.58	387.82	387.50	387.82	387.92	387.02	386.38	385.24	
Minimum	384.22	384.12	384.02	384.12	384.20	385.18	387.00	387.14	387.00	386.01	385.22	384.34	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	25.3	25.1	35.3	25.9	29.9	34.7	35.5	34.9	34.1	31.5	28.4	25.7	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>ARTHUR V. ORMOND (L&amp;D 9)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1670.0	2512.3	2764.1	2377.8	2358.9	4163.6	3944.7	4368.4	3796.1	1991.1	1003.8	927.2	31877.9
WY 2003	781.3	545.5	470.4	813.1	891.2	2222.3	1772.6	3131.3	2227.8	695.9	699.2	1216.6	15467.2
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.5	4.9	4.3	2.5	3.2	3.8	3.9	4.8	3.5	2.6	2.3	2.6	41.8
WY 2003	3.2	2.0	5.6	0.7	2.9	1.6	1.5	9.4	8.8	2.1	2.9	2.4	43.2
Deviation	-0.3	-2.9	1.4	-1.8	-0.3	-2.3	-2.4	4.6	5.3	-0.4	0.7	-0.2	1.4
<u>Pool Elevation</u>													
End of Month	285.90	284.79	285.50	286.78	285.19	285.02	287.00	285.70	285.07	286.39	286.71	285.63	
Maximum	287.07	286.97	287.26	287.20	286.98	286.90	287.00	287.29	287.28	287.11	287.22	287.10	
Minimum	284.12	284.17	284.17	283.94	284.18	284.02	283.81	283.92	284.32	284.19	284.05	284.17	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	58.6	52.8	56.5	63.4	54.9	54.0	64.6	57.5	54.3	61.2	63.0	57.2	

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<u>TOAD SUCK FERRY (L&amp;D 8)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1647.4	2563.8	2894.4	2535.9	2522.0	4362.9	4119.1	4419.3	3843.7	1993.5	983.8	905.5	32791.2
WY 2003	708.4	516.4	503.8	861.2	1022.4	2247.6	1735.5	3350.1	2041.8	673.5	685.4	1177.0	15523.1
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.4	4.8	4.1	2.3	3.0	3.6	4.0	4.5	3.3	2.7	2.3	2.6	40.6
WY 2003	3.0	2.0	5.1	0.6	3.7	1.3	1.2	8.4	5.2	4.9	5.5	3.9	45.0
Deviation	-0.4	-2.7	1.0	-1.7	0.7	-2.3	-2.8	3.9	1.9	2.2	3.2	1.3	4.3
<u>Pool Elevation</u>													
End of Month	265.04	265.14	265.20	264.88	265.06	264.83	264.70	265.09	265.00	265.05	264.96	265.47	
Maximum	265.42	265.44	265.57	265.47	265.57	265.60	265.38	268.17	265.28	265.78	265.49	265.51	
Minimum	264.56	264.85	264.72	264.75	264.35	263.67	264.28	263.97	264.10	264.68	264.78	264.66	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	33.2	33.6	33.9	32.5	33.3	32.3	31.8	33.4	33.0	33.2	32.8	35.0	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>NIMROD LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1944 thru 2003	18.8	47.2	80.7	71.4	87.5	115.5	90.3	92.4	36.7	11.1	4.2	6.5	662.3
WY 2003	0.4	6.9	84.1	48.2	68.8	52.1	13.7	65.3	63.4	8.2	1.5	0.5	413.0
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1944 thru 2003	10.6	33.8	76.3	76.6	76.5	104.0	88.8	91.1	54.7	23.8	8.5	8.0	652.5
WY 2003	1.1	5.9	54.9	77.1	60.9	55.6	7.3	59.7	64.7	10.3	3.8	2.4	403.7
<u>Basin Rainfall (inches)</u>													
Avg WY 1978 thru 2003	4.4	5.3	5.0	3.2	3.6	4.4	4.5	6.4	4.6	3.8	2.8	3.7	51.7
WY 2003	4.6	2.2	6.2	0.4	3.7	1.7	2.3	4.7	6.4	3.6	4.0	2.1	42.1
Deviation	0.2	-3.1	1.2	-2.8	0.1	-2.7	-2.2	-1.8	1.9	-0.1	1.2	-1.5	-9.7
<u>Pool Elevation</u>													
End of Month	342.10	342.28	348.41	342.20	344.14	343.16	344.40	345.31	344.69	343.79	342.95	342.17	
Maximum	342.42	342.63	348.41	352.30	347.63	345.40	344.41	353.22	351.56	344.69	343.84	342.99	
Minimum	342.09	342.08	342.22	342.10	342.20	342.88	342.97	344.39	344.68	343.66	342.92	342.16	
<u>Pool Content EOM</u> (1,000 AC. FT.)													
	29.4	30.0	58.9	29.7	37.4	33.2	38.5	42.6	39.7	35.9	32.4	29.6	

<u>MURRAY (L&amp;D 7)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1675.9	2667.2	3106.0	2701.9	2666.2	4548.6	4458.6	4711.6	3981.0	2037.4	975.1	908.5	34438.0
WY 2003	689.9	505.5	625.0	982.9	1192.2	2358.3	1722.1	3596.5	2377.0	688.9	728.8	1178.5	16645.5
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.3	5.1	4.3	2.7	3.4	4.3	4.1	4.6	2.9	2.7	2.2	2.8	42.4
WY 2003	5.4	1.8	7.5	0.5	5.4	1.8	2.1	3.9	4.2	0.7	0.9	1.3	35.5
Deviation	2.1	-3.3	3.2	-2.1	2.0	-2.5	-2.0	-0.7	1.3	-2.0	-1.3	-1.5	-7.0
<u>Pool Elevation</u>													
End of Month	249.15	249.12	249.36	249.35	249.38	248.09	249.35	248.75	249.22	249.34	249.12	249.38	
Maximum	249.42	249.43	249.45	249.44	249.54	249.48	249.66	249.51	249.41	250.55	249.55	249.64	
Minimum	248.94	249.08	249.07	249.04	249.07	248.09	248.20	247.30	248.25	249.11	249.10	248.98	
<u>Pool Content EOM</u> (1,000 AC. FT.)													
	88.6	88.3	90.8	90.7	91.0	78.8	90.7	84.8	89.4	90.6	88.3	91.0	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>DAVID D. TERRY (L&amp;D 6)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1968 thru 2003	1673.5	2657.2	3181.1	2734.1	2751.0	4566.2	4427.3	4756.7	4013.1	2073.3	1002.5	897.0	34732.9
WY 2003	620.8	431.8	486.0	857.8	1144.6	2111.0	1713.7	3591.9	2310.6	565.2	751.7	1172.1	15757.2
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.4	4.2	3.8	2.7	2.8	3.7	3.7	4.2	2.7	2.7	1.7	2.5	38.0
WY 2003	2.4	1.8	6.5	0.4	2.7	1.1	1.3	4.1	6.4	2.3	0.7	2.6	32.2
Deviation	-1.0	-2.4	2.7	-2.3	-0.1	-2.6	-2.4	-0.1	3.7	-0.4	-0.9	0.2	-5.8
<u>Pool Elevation</u>													
End of Month	231.41	231.10	231.35	231.21	230.80	230.42	231.84	231.63	231.92	231.21	231.07	231.39	
Maximum	231.66	231.70	231.82	231.56	231.72	231.64	231.84	232.13	232.21	232.17	231.69	231.74	
Minimum	230.89	230.83	230.78	229.59	230.45	230.00	230.07	230.39	230.94	230.64	230.51	230.69	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	51.4	50.0	51.1	50.5	48.7	47.3	53.4	52.4	53.7	50.5	49.8	51.3	

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<u>LOCK AND DAM NO. 5</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1727.3	2709.3	3166.1	2755.6	2728.2	4583.6	4462.8	4799.3	4052.2	2075.4	1006.8	931.5	34998.3
WY 2003	608.3	481.3	654.6	999.9	1262.9	2375.1	1773.8	3630.3	2427.8	627.8	747.7	1147.2	16736.7
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.8	4.2	4.8	3.2	3.3	4.1	4.1	5.0	3.2	3.1	2.4	3.3	44.4
WY 2003	4.4	2.0	7.2	0.3	6.6	1.9	1.4	5.3	7.1	1.4	3.2	3.6	44.3
Deviation	0.7	-2.2	2.4	-2.8	3.2	-2.2	-2.7	0.3	3.9	-1.7	0.8	0.3	-0.1
<u>Pool Elevation</u>													
End of Month	213.27	213.33	213.13	213.17	213.04	212.70	213.50	213.81	213.48	214.04	213.70	213.61	
Maximum	213.55	213.57	213.52	213.40	213.74	213.49	213.58	214.04	214.14	214.21	214.47	214.40	
Minimum	212.77	212.86	212.70	212.73	212.19	212.03	212.39	211.18	213.11	213.38	213.47	213.40	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	63.2	63.7	62.2	62.5	61.6	59.4	64.9	67.1	64.8	68.8	66.3	65.7	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>EMMETT SANDERS (L&amp;D 4)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1730.0	2723.7	3194.5	2772.5	2748.3	4673.4	4600.7	4922.5	4147.5	2081.0	990.9	925.3	35510.4
WY 2003	678.9	492.5	734.5	1080.3	1352.2	2468.3	1799.0	3638.1	2208.8	617.4	613.3	1083.9	16767.3
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.6	4.6	5.3	3.2	3.7	4.4	4.2	4.6	3.4	3.0	2.2	2.5	44.7
WY 2003	4.8	2.4	8.4	0.4	6.1	1.5	2.4	5.6	3.9	2.9	0.8	1.7	40.9
Deviation	1.1	-2.2	3.2	-2.9	2.4	-2.9	-1.8	1.0	0.5	-0.1	-1.3	-0.8	-3.8
<u>Pool Elevation</u>													
End of Month	196.05	196.36	196.20	195.95	195.88	195.45	196.09	195.94	196.02	196.32	196.05	196.11	
Maximum	196.59	196.59	196.54	196.64	196.53	196.51	196.43	196.41	196.49	196.57	196.46	196.64	
Minimum	195.79	195.78	195.76	195.69	195.56	195.13	195.17	195.07	195.36	195.85	195.79	195.72	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	70.7	72.8	71.7	70.1	69.8	67.4	71.0	70.1	70.5	72.5	70.7	71.1	

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<u>LOCK AND DAM NO. 3</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1729.1	2748.1	3246.5	2803.4	2774.8	4720.6	4687.3	5025.6	4231.6	2104.6	979.4	912.5	35963.5
WY 2003	715.0	531.5	834.6	1136.0	1448.6	2586.6	1846.6	3671.9	2289.1	650.8	625.3	1090.2	17426.1
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.7	4.5	4.7	3.4	3.7	4.3	4.5	4.7	3.2	2.5	1.6	2.4	43.1
WY 2003	2.5	2.9	7.8	0.2	7.3	2.2	2.8	5.8	4.6	2.1	0.3	1.7	40.5
Deviation	-1.2	-1.6	3.2	-3.2	3.6	-2.1	-1.6	1.2	1.4	-0.3	-1.3	-0.6	-2.6
<u>Pool Elevation</u>													
End of Month	182.09	182.40	181.76	182.26	182.07	181.40	182.23	182.15	182.21	182.52	182.47	182.30	
Maximum	182.67	182.59	182.63	182.73	182.51	182.66	182.69	182.62	182.74	182.81	182.88	182.80	
Minimum	181.54	181.81	181.62	181.73	181.31	181.08	181.17	180.64	181.51	181.94	181.79	181.85	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	46.8	48.0	45.5	47.5	46.7	44.1	47.3	47.0	47.2	48.5	48.3	47.6	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003  
LITTLE ROCK DISTRICT  
ARKANSAS RIVER BASIN

<u>WILBUR D. MILLS DAM (L&amp;D 2)</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1970 thru 2003	1682.0	2777.0	3392.7	2904.9	2858.9	4873.1	4886.5	5088.2	4264.6	2122.7	986.6	919.3	36756.3
WY 2003	807.8	586.1	1027.2	1288.7	1663.5	2834.9	1912.3	3684.1	2501.9	671.6	622.1	1096.8	18696.9
<u>Project Rainfall (inches)</u>													
Avg WY 1978 thru 2003	3.8	4.9	4.9	3.6	4.1	4.5	4.1	4.4	3.2	2.8	1.8	2.5	44.6
WY 2003	1.6	3.5	9.9	0.4	7.0	1.1	3.5	9.6	5.4	2.3	0.2	2.0	46.5
Deviation	-2.3	-1.4	5.0	-3.2	2.9	-3.4	-0.6	5.2	2.3	-0.5	-1.6	-0.5	1.9
<u>Pool Elevation</u>													
End of Month	161.99	162.13	161.78	162.23	161.84	161.78	162.16	162.82	162.93	162.75	162.83	162.33	
Maximum	162.19	162.35	162.50	162.35	162.36	162.36	162.32	162.96	162.97	162.99	163.07	163.07	
Minimum	161.76	161.91	161.75	161.68	161.63	161.47	161.68	160.52	161.69	162.59	162.54	162.33	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	110.0	111.5	107.7	112.7	108.4	107.7	111.9	119.2	120.4	118.4	119.3	113.8	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003  
LITTLE ROCK DISTRICT  
RED RIVER BASIN

<u>DEQUEEN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1979 thru 2003	15.9	23.6	34.2	21.1	27.4	30.6	22.7	26.3	13.0	8.7	2.1	4.7	230.3
WY 2003	11.7	5.8	31.2	8.1	22.7	21.7	4.9	10.0	13.0	1.8	0.5	1.7	133.1
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1979 thru 2003	9.5	19.5	35.8	24.3	23.3	31.0	23.0	23.6	17.3	9.2	3.6	4.4	224.5
WY 2003	8.8	6.0	22.4	16.6	21.0	22.7	4.2	10.0	12.0	2.4	1.9	1.4	129.4
<u>Basin Rainfall (inches)</u>													
Avg WY 1980 thru 2003	5.9	5.5	5.6	3.4	4.1	5.0	5.0	6.7	5.2	4.5	2.8	4.9	58.6
WY 2003	6.4	1.5	7.3	0.3	5.1	2.4	2.1	4.9	8.4	2.3	2.5	4.3	47.5
Deviation	0.5	-4.0	1.7	-3.1	1.0	-2.7	-2.9	-1.8	3.2	-2.2	-0.2	-0.6	-11.1
<u>Pool Elevation</u>													
End of Month	437.26	437.09	441.88	437.17	438.11	437.34	437.45	437.18	437.42	436.63	435.43	435.45	
Maximum	440.06	437.70	441.88	443.16	442.68	440.76	437.59	438.97	440.27	437.43	436.63	435.84	
Minimum	435.42	437.05	437.08	437.16	437.16	437.00	437.11	437.18	437.00	436.63	435.42	435.28	
<u>Pool Content EOM</u> (1,000 AC. FT.)													
	35.3	35.1	43.7	35.2	36.8	35.5	35.7	35.2	35.6	34.3	32.3	32.4	

<u>GILLHAM LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1976 thru 2003	21.4	37.3	55.4	35.5	44.3	59.0	41.6	41.3	20.6	14.3	3.1	6.8	380.8
WY 2003	12.3	7.5	54.6	15.2	39.8	26.9	6.6	32.7	22.8	0.2	1.6	9.0	229.1
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1976 thru 2003	13.3	31.8	55.5	40.6	38.7	57.0	46.6	38.1	25.4	15.1	6.7	5.6	374.3
WY 2003	5.8	7.3	35.2	34.2	31.5	34.4	7.0	31.8	22.8	3.4	3.3	2.6	219.4
<u>Basin Rainfall (inches)</u>													
Avg WY 1980 thru 2003	5.5	5.6	5.6	3.4	4.1	5.1	4.8	6.6	5.0	4.8	2.7	4.8	58.0
WY 2003	5.3	1.7	7.4	0.5	4.3	2.3	2.2	5.2	6.7	3.0	2.8	4.8	46.1
Deviation	-0.2	-3.9	1.7	-3.0	0.2	-2.7	-2.6	-1.4	1.7	-1.8	0.1	-0.0	-11.9
<u>Pool Elevation</u>													
End of Month	502.19	502.28	514.40	502.39	507.92	502.71	502.17	502.55	502.25	499.14	497.40	502.13	
Maximum	503.16	503.43	514.40	515.50	515.52	507.87	502.79	510.63	506.89	502.28	499.15	502.37	
Minimum	497.01	502.17	502.10	502.17	502.32	502.24	502.17	501.80	502.12	499.00	497.32	497.40	
<u>Pool Content EOM</u> (1,000 AC. FT.)													
	33.3	33.4	52.7	33.6	41.8	34.0	33.3	33.8	33.4	29.3	27.1	33.2	

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SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

LITTLE ROCK DISTRICT

RED RIVER BASIN

<u>DIERKS LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1976 thru 2003	6.2	11.1	20.9	13.6	16.2	22.0	14.1	14.3	7.9	4.9	0.9	1.8	133.9
WY 2003	0.5	0.6	12.6	5.3	14.0	7.4	1.9	11.5	1.9	0.3	0.1	0.3	56.3
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1976 thru 2003	5.4	7.2	17.8	17.4	13.9	20.0	15.9	13.4	8.9	6.0	2.0	1.5	129.4
WY 2003	1.6	0.4	4.2	9.5	10.2	10.6	1.7	11.0	1.6	1.1	1.1	5.6	58.8
<u>Basin Rainfall (inches)</u>													
Avg WY 1980 thru 2003	5.7	5.5	5.9	3.6	4.4	5.3	4.7	6.4	4.7	4.6	2.6	4.5	57.8
WY 2003	6.1	1.8	6.9	0.7	5.5	2.2	2.1	5.3	4.5	3.0	2.4	4.5	45.0
Deviation	0.4	-3.7	1.0	-2.9	1.2	-3.1	-2.5	-1.1	-0.3	-1.6	-0.2	-0.0	-12.8
<u>Pool Elevation</u>													
End of Month	522.91	523.01	529.11	526.15	528.79	526.37	526.19	526.20	526.09	525.05	523.89	519.17	
Maximum	524.00	523.26	529.11	530.35	530.35	528.80	526.45	530.69	526.58	526.09	525.05	523.90	
Minimum	522.72	522.89	522.98	526.08	526.14	526.23	526.07	526.16	526.07	525.00	523.86	519.17	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	25.6	25.8	34.1	29.9	33.6	30.2	29.9	29.9	29.8	28.4	26.9	21.3	

<u>MILLWOOD LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflows (1,000 AC. FT.)</u>													
Avg WY 1973 thru 2003	192.6	393.3	615.4	462.0	498.6	681.1	528.8	539.2	384.0	170.8	88.2	104.3	4658.4
WY 2003	71.8	67.2	259.8	302.0	326.0	368.6	79.9	214.1	111.8	64.9	86.0	72.5	2024.5
<u>Releases (1,000 AC. FT.)</u>													
Avg WY 1967 thru 2003	154.9	329.0	567.7	455.0	475.4	620.9	499.4	549.4	372.8	149.2	74.1	114.1	4361.8
WY 2003	66.6	64.3	238.9	315.5	300.4	392.2	74.5	201.2	101.5	52.7	74.5	69.7	1952.0
<u>Basin Rainfall (inches)</u>													
Avg WY 1980 thru 2003	5.1	5.0	5.1	3.1	4.0	4.8	4.4	6.1	4.7	3.9	2.7	4.3	53.1
WY 2003	6.5	1.6	6.5	0.4	4.9	2.5	2.0	4.9	6.4	2.2	2.2	4.4	44.7
Deviation	1.4	-3.4	1.4	-2.7	1.0	-2.2	-2.4	-1.3	1.8	-1.7	-0.5	0.1	-8.4
<u>Pool Elevation</u>													
End of Month	259.33	259.35	260.01	259.51	260.30	259.38	259.27	259.41	259.45	259.43	259.47	259.35	
Maximum	260.06	259.64	260.25	260.43	260.86	260.30	259.59	260.11	259.69	259.60	259.56	259.80	
Minimum	259.21	259.15	259.24	259.17	259.47	259.23	259.20	259.14	259.29	259.34	259.27	259.33	
<u>Pool Content EOM</u>													
(1,000 AC. FT.)	209.0	209.6	229.3	214.4	238.6	210.5	207.2	211.4	212.6	212.0	213.2	209.6	



SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003  
FORT WORTH DISTRICT  
RED RIVER BASIN

<u>COOPER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1991-2003	35.2	44.8	81.2	36.0	52.8	52.6	38.1	40.7	25.3	13.8	4.6	6.5	431.5
WY2003	134.9	1.9	44.8	3.4	28.3	11.8	5.5	10.7	14.6	0.6	0.1	1.4	258.0
<u>Release (1000 AF)</u>													
Avg 1991-2003	9.6	25.2	54.7	42.2	37.7	64.4	42.5	24.8	14.3	7.3	3.6	0.7	327.0
WY2003	54.9	22.3	13.5	16.9	10.4	19.1	0.3	0.3	0.3	0.3	0.3	0.2	138.8
<u>Rainfall (inches)</u>													
Avg 1991-2003	4.81	4.81	4.75	3.58	3.38	3.81	3.70	4.50	3.30	2.31	1.82	3.62	44.41
WY2003	11.10	0.57	5.15	0.19	4.15	1.07	1.58	2.79	5.77	1.17	0.80	3.09	37.45
Deviation	6.29	-4.24	0.40	-3.39	0.77	-2.74	-2.12	-1.70	2.47	-1.14	-1.02	-0.53	-6.96
<u>Pool Elevation</u>													
End of month	441.27	439.79	440.88	439.83	440.59	439.95	439.80	439.61	439.74	438.79	437.60	436.79	
Maximum	443.86	441.00	440.88	440.85	440.71	440.59	440.05	439.81	439.89	439.75	438.76	437.72	
Minimum	437.43	439.79	439.77	439.83	439.75	439.95	439.80	439.45	439.41	438.79	437.60	436.79	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	335.07	306.08	327.51	307.04	321.80	309.35	306.46	302.64	305.32	287.45	265.77	251.90	

RED RIVER BASIN

<u>WRIGHT PATMAN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1957-2003	67.8	175.7	315.8	210.0	278.2	352.8	285.3	352.4	174.9	67.4	25.3	31.0	2336.5
WY2003	133.1	122.8	118.7	173.0	145.7	283.7	19.7	42.8	48.5	1.2	0.3	0.7	1090.2
<u>Release (1000 AF)</u>													
Avg 1956-2003	96.7	158.7	255.1	275.5	256.1	302.3	238.1	237.0	216.8	190.3	62.8	34.2	2323.7
WY2003	160.0	138.9	52.6	195.3	115.5	253.0	22.6	2.4	2.5	7.8	7.7	6.5	964.8
<u>Rainfall (inches)</u>													
Avg 1957-2003	4.03	3.95	4.14	2.74	3.37	4.14	4.24	4.44	3.80	2.85	2.37	3.55	43.61
WY2003	4.25	1.85	6.01	0.44	8.06	2.15	2.25	4.69	4.62	0.57	6.85	3.16	44.91
Deviation	0.22	-2.10	1.87	-2.30	4.69	-1.99	-1.99	0.25	0.82	-2.28	4.49	-0.39	1.30
<u>Pool Elevation</u>													
End of month	223.56	222.55	224.72	223.63	224.44	225.21	224.69	225.61	226.79	226.02	225.18	224.49	
Maximum	224.93	224.00	224.72	224.78	224.78	225.21	225.14	225.73	226.79	226.79	226.02	225.22	
Minimum	222.59	222.55	222.48	223.59	223.36	224.06	224.67	224.64	225.58	226.02	225.18	224.49	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	191.40	166.21	223.12	193.50	215.35	236.68	222.01	248.50	283.76	260.54	236.11	216.46	

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SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003  
FORT WORTH DISTRICT  
RED RIVER BASIN

<u>LAKE O'THE PINES</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1958-2003	13.7	32.3	70.1	65.8	78.9	104.1	73.4	66.9	34.9	14.1	5.7	10.1	570.1
WY2003	14.3	7.1	31.9	30.7	81.7	60.5	12.3	19.7	15.6	1.7	3.6	5.3	284.2
<u>Release (1000 AF)</u>													
Avg 1957-2003	10.4	19.2	48.3	65.4	71.9	82.0	68.4	55.0	38.5	16.2	8.2	9.5	493.2
WY2003	2.2	2.1	18.1	36.3	29.1	102.9	4.3	1.5	1.5	1.5	1.5	1.5	202.5
<u>Rainfall (inches)</u>													
Avg 1979-2003	4.97	4.72	5.26	3.53	4.13	4.28	3.50	4.44	4.64	2.43	1.93	3.24	47.06
WY2003	5.28	2.31	9.26	0.15	9.38	1.23	2.38	3.51	7.23	1.52	4.02	3.74	50.02
Deviation	0.31	-2.41	4.01	-3.38	5.25	-3.05	-1.11	-0.92	2.59	-0.91	2.09	0.50	2.96
<u>Pool Elevation</u>													
End of month	228.60	228.65	229.03	228.58	231.05	228.67	228.69	229.22	229.46	228.85	228.34	228.06	
Maximum	228.66	228.78	229.12	229.27	231.05	231.32	228.91	229.32	229.54	229.44	228.86	228.42	
Minimum	228.16	228.56	228.62	228.43	228.57	228.52	228.55	228.67	229.06	228.84	228.33	228.06	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	243.15	243.87	251.11	242.79	290.93	244.23	244.77	254.75	259.37	247.72	238.58	233.71	

NECHES RIVER BASIN

<u>SAM RAYBURN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1908-2003	51.6	101.2	208.2	285.2	286.1	310.4	282.8	295.3	150.9	60.7	39.1	36.0	2107.4
WY2003	158.3	322.3	594.5	290.7	571.7	468.3	184.7	47.8	182.0	114.3	26.2	61.4	3022.2
<u>Release (1000 AF)</u>													
Avg 1965-2003	85.6	67.3	64.4	124.5	165.6	262.3	262.5	220.4	197.2	186.4	142.8	109.1	1888.2
WY2003	71.7	58.0	122.7	363.3	115.3	522.2	406.7	148.8	106.9	118.5	178.9	163.1	2376.0
<u>Rainfall (inches)</u>													
Avg 1969-2003	5.09	5.69	6.11	5.42	4.24	5.22	4.07	5.09	5.78	3.90	3.81	3.95	58.37
WY2003	12.74	7.72	10.02	1.69	4.92	4.98	0.43	1.22	8.11	3.65	4.51	6.38	66.37
Deviation	7.65	2.03	3.91	-3.73	0.68	-0.24	-3.64	-3.87	2.33	-0.25	0.70	2.43	8.01
<u>Pool Elevation</u>													
End of month	159.05	161.42	165.42	164.58	168.21	167.48	165.25	163.91	164.03	163.48	161.56	160.14	
Maximum	159.05	161.77	165.42	166.15	168.21	169.85	167.38	165.19	164.03	164.09	163.42	161.66	
Minimum	157.77	159.02	161.34	164.58	164.57	167.48	165.25	163.91	163.42	163.48	161.56	160.14	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	2323.30	2569.00	3015.30	2918.80	3355.70	3264.60	2995.40	2842.40	2856.00	2794.00	2583.90	2434.90	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT

NECHES RIVER BASIN

<u>B.A. STEINHAGEN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1908-2003	101.4	167.6	294.1	453.6	460.1	553.4	529.1	567.4	320.1	180.1	106.4	90.6	3823.7
WY2003	199.2	463.5	504.3	708.6	404.9	1094.7	523.9	197.9	215.2	188.6	241.0	257.2	4999.0
<u>Release (1000 AF)</u>													
Avg 1951-2003	133.9	167.6	276.7	396.5	416.2	540.4	490.6	534.3	348.6	241.9	150.5	135.0	3832.1
WY2003	190.7	461.9	498.4	704.7	401.2	1092.3	499.9	196.2	210.1	174.7	231.7	261.5	4923.1
<u>Rainfall (inches)</u>													
Avg 1969-2003	4.15	5.20	5.75	4.77	3.83	4.33	3.99	5.25	5.60	3.33	3.46	4.16	53.83
WY2003	10.19	9.27	11.71	1.31	4.05	2.10	0.39	1.21	4.48	4.04	4.04	4.28	57.07
Deviation	6.04	4.07	5.96	-3.46	3.83	-2.23	-3.60	-4.04	-1.12	0.71	0.58	0.12	6.86
<u>Pool Elevation</u>													
End of month	82.56	82.24	82.31	82.27	82.25	81.99	83.25	82.68	82.38	82.70	82.60	81.98	
Maximum	82.80	82.97	82.87	82.39	82.75	82.38	83.25	83.26	82.94	83.01	83.06	82.96	
Minimum	81.28	81.53	81.34	81.50	81.74	81.28	82.15	82.25	81.35	82.35	82.31	81.98	
<u>Pool Content (EOM)</u>													
(1000 Ac-Ft)	88.23	84.26	85.01	84.64	84.26	81.15	97.58	89.94	86.04	90.07	88.89	56.66	

TRINITY RIVER BASIN

<u>BENBROOK LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	4.0	3.6	6.4	7.7	11.1	14.7	8.2	2.5	1.8	1.6	3.3	2.5	67.4
WY2003	3.5	0.2	4.4	2.6	9.9	9.7	4.8	1.8	0.2	0.7	1.4	0.3	39.6
<u>Release (1000 AF)</u>													
Avg 1952-2003	1.2	4.7	2.9	4.3	4.3	10.2	6.4	12.4	11.6	3.1	1.2	1.0	63.3
WY2003	0.5	0.5	0.4	0.4	7.0	7.4	1.3	0.8	1.7	3.1	0.6	0.2	23.9
<u>Rainfall (inches)</u>													
Avg 1952-2003	3.52	2.27	2.23	1.70	2.05	2.65	3.50	4.54	3.14	2.08	2.09	3.10	32.88
WY2003	5.90	0.60	4.19	0.41	3.36	0.73	1.35	1.93	3.90	0.21	2.47	5.31	30.38
Deviation	2.38	-1.67	1.96	-1.29	1.31	-1.92	-2.15	-2.61	0.76	-1.87	0.38	2.21	-2.51
<u>Pool Elevation</u>													
End of month	691.04	691.79	693.31	694.08	694.76	694.39	693.42	693.03	693.38	691.17	689.12	689.71	
Maximum	691.04	691.80	693.31	694.08	695.71	694.97	694.34	693.41	693.66	693.38	691.11	689.85	
Minimum	688.97	691.11	691.79	693.42	694.11	694.39	693.42	692.84	692.96	691.17	689.12	688.74	
<u>Pool Content (EOM)</u>													
(1000 Ac-Ft)	75.25	77.81	83.14	85.92	88.42	87.07	83.54	82.15	83.40	75.69	68.95	70.84	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
TRINITY RIVER BASIN

<u>JOE POOL LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1987-2003	7.3	4.9	13.5	6.1	14.0	11.8	10.6	18.5	11.1	1.9	2.9	2.8	105.4
WY2003	11.8	0.3	10.2	0.5	15.0	2.6	4.5	9.4	15.0	1.4	2.1	13.2	85.8
<u>Release (1000 AF)</u>													
Avg 1986-2003	0.2	4.2	3.6	6.5	5.7	11.8	6.7	8.9	8.3	2.9	0.2	0.5	59.5
WY2003	0.2	0.3	0.3	5.1	4.6	8.4	0.3	0.7	14.4	0.8	0.1	0.1	35.4
<u>Rainfall (inches)</u>													
Avg 1985-2003	4.74	3.18	3.82	2.05	3.05	2.97	3.16	4.61	4.21	1.58	2.18	2.95	38.50
WY2003	8.80	0.73	5.07	0.25	3.47	0.96	2.56	4.06	6.53	0.60	2.10	4.86	39.99
Deviation	4.06	-2.45	1.25	-1.80	0.42	-2.01	-0.60	-0.55	2.32	-0.98	-0.08	1.91	1.49
<u>Pool Elevation</u>													
End of month	522.07	521.76	522.87	522.00	523.19	522.14	522.26	522.93	522.48	521.72	521.25	522.43	
Maximum	522.14	522.06	522.87	522.91	523.37	523.07	522.26	522.95	524.24	522.41	521.69	522.59	
Minimum	520.70	521.76	521.75	522.00	521.99	522.11	522.00	522.17	522.48	521.72	521.24	521.10	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	177.42	175.11	183.47	176.90	185.93	177.94	178.84	183.86	180.51	174.74	171.34	180.13	

TRINITY RIVER BASIN

<u>RAY ROBERTS LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	22.3	27.4	44.5	23.7	43.5	51.5	44.7	55.0	30.6	16.9	8.3	11.3	379.5
WY2003	30.4	7.0	35.1	5.0	20.7	18.8	7.6	17.4	14.9	0.1	6.2	12.5	175.6
<u>Release (1000 AF)</u>													
Avg 1952-2003	6.7	6.9	19.6	12.1	14.0	34.4	28.4	39.2	29.6	26.7	7.7	4.0	229.2
WY2003	0.4	0.4	0.4	9.3	2.0	24.2	1.1	1.1	1.4	0.5	0.2	0.3	41.1
<u>Rainfall (inches)</u>													
Avg 1952-2003	na												
WY2003	na												
Deviation	na												
<u>Pool Elevation</u>													
End of month	632.05	631.93	632.84	632.48	632.95	632.46	632.24	632.37	632.22	631.45	630.93	630.85	
Maximum	632.06	632.17	632.84	632.87	632.95	633.22	632.47	632.44	632.52	632.20	631.41	631.10	
Minimum	631.26	631.93	631.90	632.48	632.46	632.46	632.22	632.10	632.22	631.45	630.91	630.80	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	786.34	783.16	809.48	799.16	812.75	798.57	792.15	795.94	791.27	769.41	754.44	752.48	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
TRINITY RIVER BASIN

<u>LEWISVILLE LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	40.8	33.4	36.2	29.0	52.4	68.3	74.6	101.0	58.4	23.2	12.6	25.8	555.6
WY2003	50.8	6.2	55.6	17.7	45.9	53.2	14.5	48.4	30.0	5.3	15.8	23.4	367.0
<u>Release (1000 AF)</u>													
Avg 1952-2003	24.4	35.9	38.4	30.1	33.6	55.6	48.4	77.2	74.8	50.6	29.5	19.9	518.4
WY2003	13.0	11.0	6.7	8.3	6.6	30.2	10.9	18.5	15.7	24.9	30.3	22.4	198.5
<u>Rainfall (inches)</u>													
Avg 1952-2003	3.74	2.49	2.55	1.83	2.24	3.03	3.79	4.84	3.50	2.09	1.88	3.66	35.65
WY2003	7.77	0.55	4.39	0.22	3.05	0.64	2.66	3.44	4.32	0.60	1.49	7.43	36.56
Deviation	4.03	-1.94	1.84	-1.61	0.81	-2.39	-1.13	-1.40	0.82	-1.49	-0.39	3.77	0.91
<u>Pool Elevation</u>													
End of month	519.81	519.19	520.61	520.67	521.76	522.15	521.73	522.17	521.96	520.38	519.01	518.52	
Maximum	519.87	519.82	520.61	520.74	521.76	522.40	522.24	522.25	522.37	521.91	520.33	519.08	
Minimum	518.47	519.19	519.14	520.65	520.62	521.96	521.73	521.11	521.89	520.38	519.01	518.52	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	577.93	561.23	600.37	602.08	633.91	645.43	632.73	646.03	639.51	593.86	556.78	543.86	

TRINITY RIVER BASIN

<u>GRAPEVINE LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	11.4	8.0	10.1	9.7	17.1	18.9	23.6	31.6	17.9	5.3	1.9	5.1	160.6
WY2003	18.8	1.9	18.3	5.6	21.1	12.1	9.9	10.9	17.0	0.0	4.4	10.9	130.9
<u>Release (1000 AF)</u>													
Avg 1952-2003	4.4	8.1	11.4	9.7	8.7	13.2	13.7	16.7	19.4	14.1	11.0	4.8	135.2
WY2003	6.3	5.1	5.3	5.3	4.8	14.1	7.4	4.6	15.3	5.0	5.7	5.4	84.6
<u>Rainfall (inches)</u>													
Avg 1952-2003	3.60	2.49	2.43	1.82	2.26	2.90	3.83	4.95	3.18	2.18	1.90	3.35	34.89
WY2003	8.56	0.82	5.06	0.29	4.50	0.74	2.63	3.63	5.80	0.02	2.92	4.97	39.94
Deviation	4.96	-1.67	2.63	-1.53	2.24	-2.16	-1.20	-1.32	2.62	-2.16	1.02	1.62	5.05
<u>Pool Elevation</u>													
End of month	533.36	532.48	534.01	533.84	535.90	535.32	535.22	535.63	535.27	533.79	532.91	533.19	
Maximum	533.45	533.36	534.01	534.14	535.90	536.31	535.95	535.70	537.31	535.23	533.77	533.53	
Minimum	531.26	532.48	532.41	533.84	533.74	535.27	535.16	534.61	535.27	533.79	532.91	532.62	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	169.29	163.24	173.97	172.75	187.64	183.44	182.64	185.72	183.01	172.40	166.21	168.10	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
TRINITY RIVER BASIN

<u>LAVON LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	17.8	24.8	34.1	28.9	45.4	48.9	54.5	70.9	38.8	13.4	4.2	11.4	393.3
WY2003	64.0	11.5	48.2	25.7	42.4	33.6	18.3	24.9	24.7	8.1	10.2	20.3	331.8
<u>Release (1000 AF)</u>													
Avg 1953-2003	7.7	10.3	17.9	20.9	20.6	34.2	28.9	56.6	36.1	15.8	6.2	3.9	258.9
WY2003	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
<u>Rainfall (inches)</u>													
Avg 1953-2003	3.99	3.06	3.03	2.14	2.65	3.28	4.07	5.30	3.69	2.26	1.97	3.96	39.40
WY2003	7.69	0.47	4.32	0.17	3.15	1.26	4.00	3.27	3.83	0.06	1.46	4.84	34.53
Deviation	3.70	-2.59	1.29	-1.97	0.50	-2.02	-0.07	-2.03	0.14	-2.20	-0.51	0.88	-4.87
<u>Pool Elevation</u>													
End of month	488.86	488.31	489.81	490.36	491.63	491.92	491.44	491.31	491.08	489.27	487.48	487.09	
Maximum	488.89	488.92	489.81	490.54	491.63	492.43	492.19	491.42	491.46	491.04	489.19	487.62	
Minimum	486.43	488.31	488.20	490.14	490.31	491.80	491.44	490.82	491.06	489.27	487.48	487.09	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	392.73	382.12	411.20	422.23	448.67	454.61	444.46	441.95	436.96	400.73	366.40	359.13	

TRINITY RIVER BASIN

<u>NAVARRO MILLS LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1907-2003	6.2	7.0	12.3	10.2	12.3	13.7	16.6	26.8	13.8	3.2	1.9	2.7	126.8
WY2003	5.1	1.1	28.9	2.7	19.7	8.1	2.4	1.2	4.5	0.9	1.7	1.6	78.1
<u>Release (1000 AF)</u>													
Avg 1962-2003	2.1	7.3	8.8	11.0	9.7	12.8	12.2	14.3	17.6	5.1	1.3	1.0	103.3
WY2003	0.0	0.0	10.4	12.5	7.5	17.2	0.8	0.0	0.0	0.0	0.0	0.0	48.4
<u>Rainfall (inches)</u>													
Avg 1962-2003	4.45	3.20	3.24	2.10	2.68	3.02	3.28	4.99	3.27	1.73	2.27	3.17	37.42
WY2003	9.10	1.21	7.26	0.40	3.79	1.01	1.10	1.89	7.73	0.58	1.25	3.71	39.04
Deviation	4.65	-1.99	4.02	-1.70	1.11	-2.01	-2.18	-3.10	4.46	-1.15	-1.02	0.54	1.62
<u>Pool Elevation</u>													
End of month	423.73	423.54	427.02	424.68	426.73	424.68	424.48	424.13	424.39	423.66	423.16	422.89	
Maximum	423.79	423.83	427.02	427.15	426.92	426.69	424.74	424.54	424.65	424.36	423.65	423.13	
Minimum	423.04	423.54	423.52	424.64	424.67	424.68	424.45	424.13	424.00	423.66	422.98	422.89	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	53.13	52.20	70.50	57.88	68.85	57.88	56.86	55.10	56.36	52.78	50.36	49.07	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
TRINITY RIVER BASIN

<u>BARDWELL LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1938-2003	4.1	3.5	7.5	5.5	8.3	8.4	10.1	12.9	8.0	1.7	0.9	1.8	72.5
WY2003	3.5	0.2	12.4	4.5	11.7	7.8	3.2	3.6	16.9	1.0	1.4	1.7	68.0
<u>Release (1000 AF)</u>													
Avg 1966-2003	1.1	4.5	5.5	7.8	6.1	10.2	7.6	9.5	11.8	1.5	0.2	0.3	66.2
WY2003	0.0	0.0	2.8	6.1	4.4	13.3	1.1	0.4	15.9	0.0	0.0	0.0	44.0
<u>Rainfall (inches)</u>													
Avg 1965-2003	4.38	3.12	3.31	2.35	2.94	3.15	3.30	4.91	3.54	2.05	2.15	3.50	38.70
WY2003	5.27	0.73	6.01	0.48	4.90	0.67	1.37	2.68	5.19	0.38	2.81	5.57	36.07
Deviation	0.89	-2.39	2.70	-1.87	1.96	-2.48	-1.93	-2.23	1.65	-1.66	0.66	2.07	-2.63
<u>Pool Elevation</u>													
End of month	419.80	419.45	422.12	421.38	423.12	421.32	421.45	421.82	421.45	420.85	420.06	419.88	
Maximum	419.84	419.84	422.12	422.23	423.12	423.33	421.45	421.82	424.41	421.45	420.82	420.15	
Minimum	419.07	419.45	419.45	421.17	421.10	421.16	421.12	421.39	421.44	420.85	420.01	419.88	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	42.79	41.73	50.36	47.69	54.13	47.49	47.97	49.26	47.97	46.03	43.58	43.00	

BRAZOS RIVER BASIN

<u>WHITNEY LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1899-2003	106.3	62.1	73.5	54.7	73.2	84.3	131.5	255.3	169.9	85.2	65.4	95.3	1256.6
WY2003	37.9	9.1	32.3	11.5	35.0	36.1	16.1	14.8	31.5	6.8	10.3	20.8	262.1
<u>Release (1000 AF)</u>													
Avg 1951-2003	73.7	52.0	45.0	63.6	58.7	96.8	70.7	186.2	173.9	68.2	50.4	53.6	992.9
WY2003	35.0	41.5	36.2	15.5	16.6	9.5	14.9	17.7	16.0	23.0	11.5	7.3	244.8
<u>Rainfall (inches)</u>													
Avg 1952-2003	3.49	2.53	2.45	1.84	2.16	2.49	3.37	4.50	3.42	2.04	2.23	3.06	33.57
WY2003	5.78	0.42	5.21	0.51	2.61	1.14	0.67	4.97	6.38	1.52	2.95	4.17	36.33
Deviation	2.29	-2.11	2.76	-1.33	0.45	-1.35	-2.70	0.47	2.96	-0.52	0.72	1.11	2.76
<u>Pool Elevation</u>													
End of month	527.54	525.56	524.98	524.69	525.53	526.66	526.39	525.86	526.13	524.51	523.87	524.21	
Maximum	528.06	527.54	525.45	525.13	525.53	526.99	526.86	526.63	526.66	526.14	524.50	524.52	
Minimum	527.40	525.54	524.88	524.61	524.35	525.49	526.37	525.86	525.76	524.51	523.79	523.59	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	508.22	470.89	460.67	455.66	470.35	491.26	486.20	476.47	481.39	452.57	441.76	447.64	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
BRAZOS RIVER BASIN

<u>AQUILLA LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1982-2003	5.0	3.6	13.7	5.5	11.2	11.1	7.1	9.3	9.3	1.1	1.5	1.4	79.8
WY2003	2.5	0.0	8.7	0.8	6.1	3.4	1.1	0.8	1.2	1.6	1.0	1.0	28.2
<u>Release (1000 AF)</u>													
Avg 1982-2003	0.7	2.8	7.1	7.4	6.7	11.3	5.4	8.4	8.9	1.1	0.6	0.2	60.6
WY2003	0.1	0.1	0.1	1.5	4.2	3.9	0.5	0.1	0.1	0.1	0.1	0.1	11.0
<u>Rainfall (inches)</u>													
Avg 1984-2003	na												
WY2003	na												
Deviation	na												
<u>Pool Elevation</u>													
End of month	536.26	535.90	538.32	537.87	538.12	537.63	537.38	537.18	536.90	536.59	536.10	535.84	
Maximum	536.29	536.27	538.32	538.38	538.63	537.99	537.65	537.54	537.34	536.89	536.54	536.11	
Minimum	535.79	535.90	535.89	537.87	537.62	537.54	537.26	537.18	536.90	536.52	536.09	535.84	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	42.16	41.09	48.79	47.27	48.11	46.48	45.67	45.02	44.13	43.17	41.68	40.91	

BRAZOS RIVER BASIN

<u>WACO LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1907-2003	22.0	15.4	26.2	19.7	30.8	33.1	43.9	65.1	33.6	11.9	8.7	15.0	325.4
WY2003	22.5	15.4	48.2	18.6	35.8	32.2	11.2	8.7	20.8	4.2	2.5	14.3	234.4
<u>Release (1000 AF)</u>													
Avg 1965-2003	5.2	10.7	19.7	28.2	27.8	50.0	31.6	57.4	34.4	8.2	4.4	4.9	282.3
WY2003	1.2	15.2	32.1	25.5	9.4	44.4	4.0	6.9	9.8	1.8	1.2	1.2	152.9
<u>Rainfall (inches)</u>													
Avg 1962-2003	3.72	2.85	2.76	2.08	2.62	2.73	3.09	4.67	3.11	2.09	2.36	3.38	35.47
WY2003	10.33	1.47	9.49	0.55	3.92	1.14	0.72	2.88	5.35	0.92	3.26	3.77	43.81
Deviation	6.61	-1.38	6.73	-1.53	1.30	-1.59	-2.37	-1.79	2.24	-1.17	0.90	0.39	8.34
<u>Pool Elevation</u>													
End of month	455.15	454.42	456.07	454.59	457.63	455.43	455.58	454.93	455.40	454.38	453.34	454.18	
Maximum	455.15	455.97	457.19	457.09	457.63	457.63	455.58	455.71	456.19	455.35	454.33	454.36	
Minimum	453.42	454.42	454.30	454.57	454.59	455.43	455.31	454.92	454.86	454.32	453.34	452.97	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	151.26	145.82	158.09	147.14	169.98	153.33	154.44	149.56	153.10	145.61	138.06	144.15	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
BRAZOS RIVER BASIN

<u>PROCTOR LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1922-2003	4.7	2.5	4.1	4.2	6.0	7.3	10.1	17.4	12.1	4.2	4.1	3.8	80.6
WY2003	23.8	2.5	1.8	0.4	3.3	2.7	1.7	1.4	4.6	0.0	0.7	0.9	43.9
<u>Release (1000 AF)</u>													
Avg 1963-2003	3.2	3.9	3.8	5.4	5.4	8.4	11.4	20.1	18.7	18.8	10.2	5.9	115.2
WY2003	10.5	6.0	0.2	0.2	0.2	2.0	1.2	1.2	0.7	1.0	1.5	0.3	25.0
<u>Rainfall (inches)</u>													
Avg 1963-2003	3.11	2.12	1.70	1.47	2.02	2.19	2.77	4.70	3.64	1.74	2.33	3.29	31.08
WY2003	6.80	0.33	3.37	0.80	3.23	1.28	0.95	2.88	5.79	0.32	1.20	2.45	29.41
Deviation	3.69	-1.79	1.67	-0.67	1.21	-0.91	-1.82	-1.82	2.15	-1.42	-1.13	-0.84	-1.68
<u>Pool Elevation</u>													
End of month	1163.00	1162.00	1162.00	1162.00	1162.50	1162.40	1162.00	1161.60	1161.90	1160.80	1159.70	1159.20	
Maximum	1164.10	1162.90	1162.20	1162.10	1162.50	1162.70	1162.30	1162.10	1162.00	1161.90	1160.70	1159.80	
Minimum	1160.20	1162.00	1162.00	1162.00	1162.00	1162.40	1162.00	1161.60	1161.50	1160.80	1159.60	1159.20	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	60.45	55.64	55.82	55.64	57.88	57.31	55.82	53.77	55.22	50.17	45.63	43.80	

BRAZOS RIVER BASIN

<u>BELTON LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1908-2003	28.1	21.0	35.5	32.3	43.0	45.4	62.2	97.3	53.7	26.1	15.9	24.4	484.8
WY2003	23.5	16.7	37.0	17.5	45.0	47.1	17.3	7.5	28.5	5.4	3.6	10.6	259.6
<u>Release (1000 AF)</u>													
Avg 1954-2003	17.3	17.8	20.2	31.5	27.4	56.8	51.2	63.1	62.5	48.0	19.8	11.4	427.0
WY2003	2.2	1.7	30.4	13.5	18.5	66.0	6.0	3.2	14.6	2.0	2.0	1.9	161.9
<u>Rainfall (inches)</u>													
Avg 1953-2003	na												
WY2003	na												
Deviation	na												
<u>Pool Elevation</u>													
End of month	593.58	594.28	594.40	594.33	596.08	594.11	594.33	593.86	594.18	593.42	592.54	592.45	
Maximum	593.58	594.41	595.44	594.40	596.70	596.27	594.38	594.34	594.99	594.15	593.37	592.62	
Minimum	592.35	593.66	594.15	594.18	594.33	594.11	594.10	593.86	593.82	593.39	592.52	592.21	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	429.41	438.06	439.43	438.56	460.95	435.82	438.68	432.85	436.69	427.45	416.83	415.64	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT

BRAZOS RIVER BASIN

<u>STILLHOUSE HOLLOW</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	11.9	9.3	15.8	16.4	26.1	27.0	25.2	40.9	17.7	10.4	4.3	8.8	213.7
WY2003	7.2	2.9	17.2	14.8	21.6	9.2	9.9	5.4	5.5	76.7	7.6	2.4	180.5
<u>Release (1000 AF)</u>													
Avg 1966-2003	4.7	6.5	8.9	18.3	17.7	25.5	25.5	29.0	23.0	21.7	4.8	3.7	189.4
WY2003	1.5	0.2	15.4	14.0	18.6	38.5	7.8	2.6	11.2	0.1	0.1	0.1	110.0
<u>Rainfall (inches)</u>													
Avg 1966-2003	3.63	2.69	2.55	1.87	2.52	2.53	2.71	4.59	3.51	1.93	2.39	3.61	34.53
WY2003	7.70	1.46	5.10	1.07	5.34	1.85	0.57	1.26	4.81	0.80	1.79	3.10	34.86
Deviation	4.07	-1.23	2.55	-0.80	2.82	-0.68	-2.14	-3.33	1.30	-1.13	-0.60	-0.51	0.33
<u>Pool Elevation</u>													
End of month	622.21	622.29	622.28	622.26	623.35	622.17	622.28	622.10	622.17	621.77	621.17	621.11	
Maximum	622.38	622.31	622.74	622.44	624.13	623.15	622.49	622.49	622.91	622.17	621.75	621.26	
Minimum	621.64	622.17	622.12	622.17	622.12	622.17	622.11	622.08	622.05	621.77	621.17	621.05	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	227.38	227.96	227.90	227.77	234.87	227.12	227.90	226.74	227.19	224.62	220.82	220.44	

BRAZOS RIVER BASIN

<u>GEORGETOWN LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1980-2003	5.5	4.9	10.8	7.4	12.9	12.1	6.5	12.1	20.3	8.8	1.7	3.5	106.5
WY2003	2.5	3.3	8.6	8.0	13.4	12.9	4.3	1.7	1.9	0.6	0.6	0.2	58.0
<u>Release (1000 AF)</u>													
Avg 1979-2003	0.8	1.2	2.8	3.3	5.2	8.6	5.0	5.2	8.0	9.3	0.4	1.3	51.0
WY2003	0.5	2.8	7.4	6.0	13.3	11.2	2.1	0.2	0.2	0.2	0.2	0.2	44.6
<u>Rainfall (inches)</u>													
Avg 1980-2003	4.17	3.51	2.87	1.85	2.52	2.91	2.58	4.71	4.37	1.52	1.92	3.17	36.10
WY2003	9.96	2.54	4.76	1.33	4.12	1.31	0.29	2.03	5.11	1.61	2.43	3.28	38.78
Deviation	5.79	-0.97	1.89	-0.52	1.60	-1.60	-2.28	-2.67	0.74	0.09	0.51	0.11	2.68
<u>Pool Elevation</u>													
End of month	792.08	791.48	791.44	792.20	791.55	791.55	791.14	790.11	789.42	787.27	784.68	782.61	
Maximum	792.08	792.38	792.40	792.63	794.75	793.01	791.56	791.13	790.23	789.35	787.16	784.61	
Minimum	791.29	791.48	791.28	791.17	791.24	791.35	791.14	790.11	789.42	787.27	784.68	782.61	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	38.44	37.63	37.59	38.59	37.72	37.74	37.20	35.87	35.01	32.37	29.36	27.08	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
BRAZOS RIVER BASIN

<u>GRANGER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1980-2003	9.4	11.7	21.2	15.6	23.3	23.8	18.1	25.5	28.4	14.4	3.4	5.8	200.7
WY2003	9.6	20.2	36.9	25.1	47.0	37.4	12.6	5.0	6.3	2.5	1.5	0.4	204.6
<u>Release (1000 AF)</u>													
Avg 1979-2003	4.8	10.4	14.2	16.3	16.5	24.7	18.2	22.8	23.7	23.6	2.2	4.0	181.3
WY2003	8.0	19.8	33.4	26.6	30.5	51.6	12.0	2.5	4.4	1.4	2.0	0.7	193.0
<u>Rainfall (inches)</u>													
Avg 1980-2003	3.61	2.95	3.33	1.94	2.24	2.56	1.97	4.75	4.20	1.33	1.69	3.07	33.64
WY2003	6.20	3.62	4.86	1.27	3.08	1.60	0.36	0.57	3.62	2.78	1.00	2.48	31.44
Deviation	2.59	0.67	1.53	-0.67	0.84	-0.96	-1.61	-4.18	-0.58	1.45	-0.69	-0.59	-2.20
<u>Pool Elevation</u>													
End of month	504.64	504.42	504.99	504.39	507.65	504.42	504.12	504.26	504.09	503.67	502.76	502.11	
Maximum	504.97	506.37	506.23	504.90	508.16	507.25	504.39	504.27	504.78	504.14	503.64	502.76	
Minimum	504.26	504.24	504.28	504.27	504.09	504.03	504.05	504.12	504.09	503.67	502.76	502.11	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	57.00	56.06	58.51	55.93	71.45	56.06	54.82	55.35	54.69	53.02	49.53	47.13	

BRAZOS RIVER BASIN

<u>SOMERVILLE LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1924-2003	16.0	17.7	22.4	24.4	28.3	21.4	25.0	34.8	25.4	10.4	3.9	9.4	239.2
WY2003	24.2	116.2	123.6	49.4	182.0	43.7	3.1	4.2	14.0	5.3	3.4	5.8	575.0
<u>Release (1000 AF)</u>													
Avg 1966-2003	7.5	13.5	19.0	23.5	24.9	27.6	23.7	27.4	27.2	20.9	6.9	3.9	226.0
WY2003	5.1	78.3	66.7	93.1	61.7	112.3	92.1	3.3	5.7	0.0	0.0	0.0	518.3
<u>Rainfall (inches)</u>													
Avg 1966-2003	4.27	3.44	3.05	2.78	2.69	2.70	2.90	4.45	3.94	1.69	2.48	4.01	38.38
WY2003	9.30	6.13	7.16	1.82	6.46	1.60	0.41	0.69	6.82	2.03	0.93	7.25	50.60
Deviation	5.03	2.69	4.11	-0.96	3.77	-1.10	-2.49	-3.76	2.88	0.34	-1.55	3.24	12.22
<u>Pool Elevation</u>													
End of month	239.04	241.68	245.39	242.18	249.67	245.32	238.39	237.95	238.13	238.01	237.63	237.71	
Maximum	239.14	246.25	246.05	245.40	249.74	249.62	245.08	238.36	238.66	238.22	238.00	237.97	
Minimum	237.69	238.65	241.03	242.18	239.44	245.32	238.39	237.95	237.92	238.01	237.59	237.60	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	167.23	200.85	254.33	207.61	325.95	253.25	159.68	154.60	156.55	155.17	150.87	151.88	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
COLORADO RIVER BASIN

<u>TWIN BUTTES LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1963-2003	5.3	3.2	3.3	28.7	4.2	3.9	4.9	6.5	4.3	2.4	6.2	6.5	79.3
WY2003	5.7	0.7	0.3	0.9	1.2	1.2	2.7	0.3	0.0	0.0	5.7	1.4	20.2
<u>Release (1000 AF)</u>													
Avg 1962-2003	1.4	1.2	1.2	0.8	1.3	2.1	2.9	4.0	3.7	5.9	4.6	1.7	30.8
WY2003	1.7	0.3	0.4	0.3	0.0	0.3	0.4	1.0	3.1	1.4	1.3	0.4	10.5
<u>Rainfall (inches)</u>													
Avg 1963-2003	1.55	1.09	0.67	0.53	1.01	0.76	1.32	2.25	1.79	0.79	1.70	2.34	15.80
WY2003	2.08	2.16	0.25	0.81	1.45	0.65	0.33	1.43	0.03	0.22	2.63	0.32	12.37
Deviation	0.53	1.07	-0.42	0.28	0.45	-0.11	-0.99	-0.82	-1.76	-0.57	0.93	-2.02	-3.43
<u>Pool Elevation</u>													
End of month	1890.20	1890.60	1890.30	1890.90	1892.00	1892.70	1894.50	1893.20	1888.90	1886.00	1890.80	1891.20	
Maximum	1890.60	1890.70	1890.50	1890.90	1892.00	1892.80	1895.10	1894.50	1893.20	1888.80	1890.80	1892.00	
Minimum	1884.60	1889.90	1890.10	1890.30	1890.90	1892.00	1892.70	1893.20	1888.90	1886.00	1883.50	1891.00	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	7.80	8.08	7.86	8.36	9.37	10.00	11.87	10.58	6.70	4.42	8.25	8.62	

COLORADO RIVER BASIN

<u>O.C. FISHER LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1915-2003	3.3	0.4	0.4	0.3	0.6	1.1	3.2	4.9	2.5	2.6	1.4	5.9	26.5
WY2003	0.7	0.4	0.5	0.4	0.4	0.5	0.1	0.0	2.8	0.0	0.1	0.1	6.1
<u>Release (1000 AF)</u>													
Avg 1952-2003	1.1	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.3	0.4	0.4	0.2	3.6
WY2003	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.1	0.1	0.3	0.1	0.1	3.3
<u>Rainfall (inches)</u>													
Avg 1952-2003	2.43	1.21	0.88	na									
WY2003	5.21	0.44	1.31	na									
Deviation	2.78	-0.77	0.43	na									
<u>Pool Elevation</u>													
End of month	1859.90	1859.60	1859.60	1859.30	1859.20	1859.00	1858.30	1857.20	1862.30	1860.60	1859.80	1859.30	
Maximum	1859.90	1860.00	1859.70	1859.50	1859.30	1859.20	1858.90	1858.20	1862.80	1862.30	1860.50	1859.70	
Minimum	1859.30	1859.60	1859.50	1859.30	1859.10	1859.00	1858.30	1857.20	1857.20	1860.60	1859.80	1859.30	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	3.61	3.46	3.44	3.31	3.27	3.16	2.86	2.39	4.84	3.94	3.54	3.31	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

FORT WORTH DISTRICT  
COLORADO RIVER BASIN

<u>HORDS CREEK LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1942-2003	0.3	0.1	0.2	0.1	0.2	0.3	0.4	0.9	0.5	0.2	0.1	0.3	3.5
WY2003	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	1.4
<u>Release (1000 AF)</u>													
Avg 1951-2003	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.2	0.0	0.0	0.0	1.1
WY2003	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7
<u>Rainfall (inches)</u>													
Avg 1948-2003	2.58	1.60	1.11	1.13	1.38	1.51	2.30	3.69	3.31	1.90	2.00	3.06	25.58
WY2003	6.96	0.75	1.25	0.39	1.81	1.23	1.17	2.41	7.58	0.36	2.22	1.85	27.98
Deviation	4.38	-0.85	0.14	-0.74	0.43	-0.28	-1.13	-1.28	4.27	-1.54	0.22	-1.21	2.40
<u>Pool Elevation</u>													
End of month	1884.00	1883.60	1883.30	1883.00	1882.80	1882.40	1881.90	1881.50	1882.20	1881.20	1880.40	1879.90	
Maximum	1884.00	1884.00	1883.60	1883.30	1883.00	1882.80	1882.40	1882.10	1882.50	1882.20	1881.20	1880.40	
Minimum	1883.10	1883.60	1883.30	1883.00	1882.70	1882.40	1881.90	1881.50	1881.40	1881.20	1880.40	1879.90	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	2.63	2.55	2.49	2.42	2.38	2.31	2.22	2.14	2.27	2.09	1.95	1.85	

COLORADO RIVER BASIN

<u>MARSHALL FORD LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1941-2003	113.0	64.1	72.0	76.8	96.9	102.8	116.7	207.5	182.3	87.9	78.5	102.2	1300.7
WY2003	113.3	504.3	58.0	99.8	86.8	148.0	104.4	115.6	23.9	32.6	39.6	44.1	1370.4
<u>Release (1000 AF)</u>													
Avg 1943-2003	58.8	49.0	50.9	56.1	71.2	93.9	105.5	156.5	185.8	132.5	108.1	85.2	1153.6
WY2003	20.3	3.5	39.3	71.1	122.8	120.1	114.7	112.5	80.3	84.0	78.9	41.3	888.8
<u>Rainfall (inches)</u>													
Avg 1951-2003	3.25	2.21	1.58	1.36	1.89	1.92	2.50	4.14	3.38	1.71	2.16	3.01	29.11
WY2003	4.17	6.90	2.85	3.12	1.02	5.96	1.17	3.56	1.05	0.40	5.10	2.94	38.24
Deviation	0.92	4.69	1.27	1.76	-0.87	4.04	-1.33	-0.58	-2.33	-1.31	2.94	-0.07	9.13
<u>Pool Elevation</u>													
End of month	648.59	681.08	681.86	683.13	680.94	682.10	681.09	680.67	676.89	673.00	669.81	669.46	
Maximum	648.59	681.08	682.42	683.16	683.04	682.21	682.01	682.05	680.58	676.85	672.93	670.46	
Minimum	640.24	648.81	681.19	681.75	680.85	680.60	680.80	680.67	676.89	673.00	669.60	669.46	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)	669.05	1167.00	1181.60	1205.80	1164.50	1186.10	1167.30	1159.50	1090.80	1022.90	969.48	963.76	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003  
FORT WORTH DISTRICT  
GUADALUPE RIVER BASIN

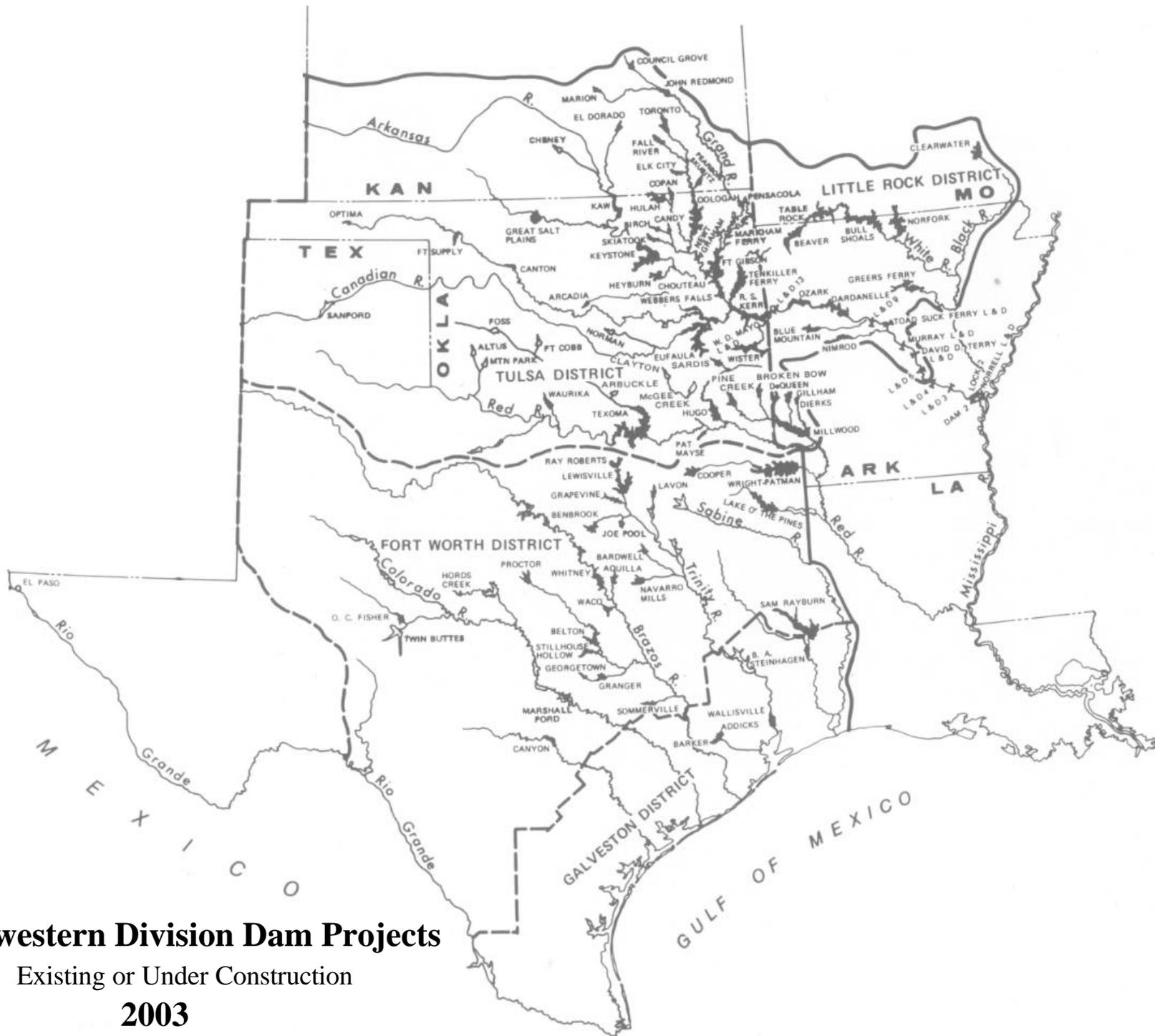
<u>CANYON LAKE</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1915-2003	31.1	20.1	22.5	22.3	24.4	27.0	30.7	39.0	37.9	32.8	18.4	24.7	330.9
WY2003	66.4	62.4	52.5	39.4	52.1	52.5	30.6	18.7	28.3	20.3	13.4	15.0	451.7
<u>Release (1000 AF)</u>													
Avg 1958-2003	17.1	24.6	20.8	24.3	21.2	28.2	26.8	26.8	32.1	43.9	30.2	20.6	316.5
WY2003	40.4	86.4	48.6	25.8	40.7	58.0	28.9	25.2	21.3	20.4	16.3	14.8	426.8
<u>Rainfall (inches)</u>													
Avg 1962-2003	4.02	2.90	2.21	1.90	2.00	2.11	2.71	4.21	3.93	2.26	2.80	3.73	34.77
WY2003	7.73	3.26	4.54	1.51	4.34	1.05	0.37	0.14	6.25	3.62	4.15	3.69	40.65
Deviation	3.71	0.36	2.33	-0.39	2.34	-1.06	-2.34	-4.06	2.32	1.37	1.35	-0.04	5.89
<u>Pool Elevation</u>													
End of month	912.52	909.30	909.57	911.02	912.18	911.27	911.13	909.87	910.20	909.69	908.71	908.32	
Maximum	913.36	912.02	912.00	911.02	912.18	912.55	911.16	911.16	910.88	910.32	909.64	908.67	
Minimum	909.41	909.06	909.17	908.81	908.91	908.68	910.17	909.87	909.85	909.69	908.68	908.32	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)													
	408.60	381.39	383.65	395.77	405.76	397.98	396.70	386.16	388.93	384.57	376.50	373.29	

SUMMARY OF LAKE CONDITIONS FOR WATER YEAR 2003

GALVESTON DISTRICT  
SAN JACINTO RIVER BASIN

<u>BARKER RESERVOIR</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1945-2003	8.0	8.1	8.2	9.7	8.5	6.0	6.2	8.0	9.8	6.2	4.8	8.2	91.8
WY2003	44.7	39.3	15.0	11.3	11.5	7.9	2.8	1.6	4.0	5.4	11.7	7.2	162.5
<u>Release (1000 AF)</u>													
Avg 1964-2003	8.1	9.6	8.9	8.9	9.0	8.0	6.7	8.7	9.1	6.6	4.7	9.0	97.4
WY2003	6.5	61.6	25.4	10.2	11.5	8.0	2.4	2.0	4.0	5.5	11.2	8.7	154.8
<u>Rainfall (inches)</u>													
Avg 1945-2003	4.08	3.62	3.29	3.26	2.88	3.24	3.08	4.14	4.10	2.97	3.77	4.29	42.72
WY2003	13.78	4.98	5.06	2.22	3.12	1.73	1.09	0.02	4.07	3.86	8.18	8.52	56.63
<u>Pool Elevation</u>													
End of month	93.26	89.61	80.54	74.56	77.02	73.90	82.61	73.67	73.80	73.78	73.67	73.79	
Maximum	93.26	95.51	88.99	86.21	85.78	82.17	82.61	82.20	76.55	78.40	86.94	84.50	
Minimum	73.77	89.61	74.86	74.27	74.23	73.88	73.84	73.66	73.69	73.78	73.67	73.79	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)													
	38.75	14.02	0.06	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	

<u>ADDICKS RESERVOIR</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
<u>Inflow (1000 AF)</u>													
Avg 1948-2003	9.1	8.4	8.6	7.6	8.0	5.5	6.4	8.1	8.3	5.3	6.3	7.7	89.2
WY2003	33.6	40.0	15.4	7.1	10.6	8.1	3.4	2.6	6.3	5.8	15.2	15.9	164.0
<u>Release (1000 AF)</u>													
Avg 1964-2003	9.3	10.6	9.7	8.3	8.2	7.1	6.7	9.4	9.1	6.2	5.3	8.8	98.7
WY2003	5.4	52.2	30.4	7.6	10.5	8.1	2.9	3.1	6.4	5.8	15.7	15.6	163.5
<u>Rainfall (inches)</u>													
Avg 1948-2003	4.26	3.55	3.36	4.32	3.00	2.53	3.11	3.96	4.07	2.97	3.50	4.41	43.04
WY2003	13.78	4.98	5.06	2.27	3.19	1.72	1.08	0.06	4.62	4.01	8.53	9.39	58.69
<u>Pool Elevation</u>													
End of month	96.38	93.90	82.34	72.03	77.65	71.93	82.55	71.77	72.22	71.83	71.88	71.76	
Maximum	96.51	99.56	93.33	87.08	87.01	81.29	82.58	81.81	80.34	78.42	91.66	89.93	
Minimum	71.67	93.90	72.35	71.84	71.60	71.93	71.92	71.73	71.74	71.74	71.77	71.76	
<u>Pool Content (EOM)</u> (1000 Ac-Ft)													
	28.38	16.30	0.47	0.00	0.07	0.00	0.50	0.00	0.00	0.00	0.00	0.00	



**Southwestern Division Dam Projects**  
 Existing or Under Construction  
**2003**  
 (With Section 7 Flood Control Projects Added)